

PRAIRIE BIRDS



CANADA GOOSE

PRAIRIE BIRDS

BY

B. J. HALES, B.A., LL.B.

PRINCIPAL, NORMAL SCHOOL, BRANFON, MANITOBA



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PREFACE

The purpose of this book is to supply such knowledge as to enable any interested person to identify the birds most likely to be seen. It will be found perhaps, quite as valuable for what it omits as what it includes; as much confusion arises from using books containing species not found in the range.

It is true that identification is not the whole of bird study but it is the starting point. If identification is followed with patience and accuracy, there is little danger that the other things will be overlooked.

Every available source of information has been freely used, not only all the literature on the subject, but the experience of other people, as well as a first-hand acquaintance by the writer over a period of almost thirty years. An attempt has been made to give full credit in the text to the source from which information has been drawn, and if there should be any case where this has not been done, it has been in error not with intent.

The descriptions have in almost every case been either made direct from specimens in hand or carefully checked from the specimens. In less than ten cases has the description had to be compiled, and these were of the more rare species. Full reference was made, however, to descriptions in all the well known sources, particularly those of Coues, Ridgway and Chapman.

It is hoped that the book, without laying any claim to making an addition to the body of human knowledge, will be found to contain information useful to the teacher and the inexperienced amateur, leading them to a place where they can use to advantage works more technical and extensive.

B. J. H.

Brandon, Feb., 1927.



TABLE OF CONTENTS

	PAGE
PYGOPODES: DIVING BIRDS.....	1
GREBES	2
LOONS	9
LONGIPENNES: LONG-WINGED SWIMMERS....	11
GULLS	12
TERNs	16
STEGANOPODES: TOTIPALMATE SWIMMERS	21
CORMORANTS	21
PELICANS	23
ANSERES: LAMELLIROSTRAL SWIMMERS.....	25
MERGANSERS	26
RIVER DUCKS	29
SEA DUCKS	42
GEESE	54
SWANS	63
HERODIONES: WADING BIRDS.....	66
HERONS	66
BITTERNs	66
PALUDICOLÆ: MARSH BIRDS.....	74
CRANES	74
RAILS	78
COOTS	81
LIMICOLÆ: SHORE BIRDS.....	83
PHALAROPES	83
AVOCETS	85
SNIPES AND SANDPIPERS.....	85
PLOVERS	98
TURNSTONES	101
GALLINÆ: GALLINACEOUS BIRDS.....	103
PARTRIDGES AND PHEASANTS.....	103
GROUSE, SPRUCE PARTRIDGES AND PTARMIGANS.....	105

COLUMBÆ: PIGEONS AND DOVES.....	119
RAPTORES: BIRDS OF PREY.....	122
VULTURES	123
HAWKS AND EAGLES	124
OSPREYS	144
OWLS	146
COCCYGES: CUCKOOS AND KINGFISHERS.....	159
CUCKOOS	159
KINGFISHERS	160
PICI: WOODPECKERS.....	164
MACROCHIRÆ: GOATSUCKERS, SWIFTS AND	
HUMMINGBIRDS	176
GOATSUCKERS	176
WHIP-POOR-WILLS	176
NIGHTHAWKS	178
SWIFTS	180
HUMMINGBIRDS	183
PASSERES: PERCHING BIRDS	185
FLYCATCHERS	187
LARKS	198
CROWS, JAYS AND MAGPIES.....	200
BLACKBIRDS AND ORIOLES.....	208
FINCHES, SPARROWS AND BUNTINGS.....	219
TANAGERS	255
SWALLOWS	256
WAXWINGS	263
SHRIKES	266
VIREOS	270
WOOD WARBLERS	273
THRASHERS AND CATBIRDS.....	300
WRENS	303
CREEPERS	309
NUTHATCHES	311
CHICKADEES	314
KINGLETS	317
THRUSHES, BLUEBIRDS, ROBINS	320

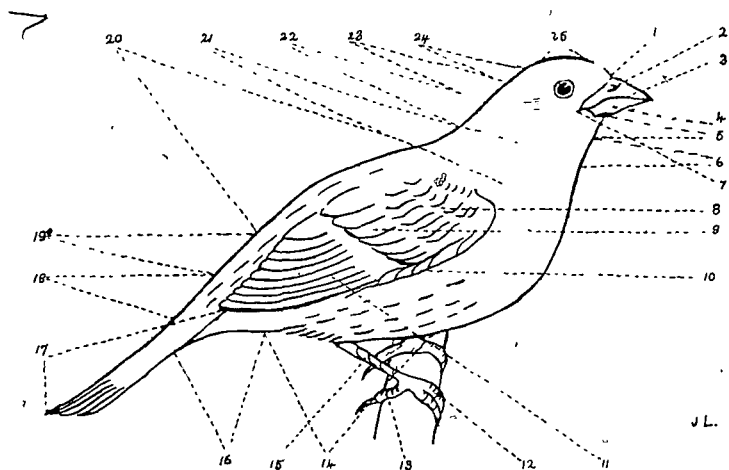
LIST OF ILLUSTRATIONS

	PAGE
Canada Goose	<i>Frontispiece</i>
Holboell's Grebe. Western Grebe	4
Eared Grebe. Horned Grebe	6
Ring-billed Gull. Franklin's Gull. Herring Gull.....	12
Caspian Tern. Forster's Tern. Common Tern.....	17
Double-crested Cormorant	22
American Merganser	26
Hooded Merganser	28
Mallard	30
Baldpate. Gadwall	33
Pintail	40
Redhead	42
Canvas-back	44
Golden-eye. Buffle-head. Ring-neck. Lesser Scaup. Scaup Duck	47
White-winged Scoter	52
Snow Goose	54
Blue Goose	57
White-fronted Goose	59
Hutchins's Geese in Stubble	60
Brant	62
The Last Trumpeter Swans in Their Natural Sur- roundings	64
Least Bittern	68
Great Blue Heron	69
Black-crowned Night Heron	72
Whooping Crane. Sandhill Crane. Little Brown Crane	77

	PAGE
Carolina Rail. Virginia Rail. Coot	79
Wilson's Snipe	86
Least Sandpiper	89
Hudsonian Godwit. Willet. Avocet. Marbled God- wit. Dowitcher. Greater Yellow-legs. Lesser Yellow-legs	91
Spotted Sandpiper	96
Killdeer on the Nest	101
Gray Partridge	104
Spruce Partridge	107
Ruffed Grouse	111
Willow Ptarmigan	114
Pinnated Grouse	115
Mourning Dove	121
Turkey Vulture	124
Young Marsh Hawks in the Nest	126
Sharp-shinned Hawk	127
Golden Eagle	136
Bald Eagle	138
Young Sparrow Hawk at the Nest	143
Screech Owl	151
Great Horned Owl	154
Young Burrowing Owls	157
Belted Kingfisher	161
Yellow-bellied Sapsucker	168
Red-headed Woodpecker	171
Downy Woodpecker and Flicker (coloured plate) <i>facing page</i>	172
Whip-poor-will	177
Nighthawk	179
Chimney Swift	181
Kingbird	188
Arkansas Kingbird	190

	PAGE
Phoebe	193
Wood Pewee	196
Magpie	200
Blue Jay	202
Bobolink	210
Red-wing	213
Baltimore Oriole. Rose-breasted Grosbeak (coloured plate)	<i>facing page</i> 216
Pine Grosbeak	224
American Crossbill	227
American Goldfinch	230
Snowbird	233
Vesper Sparrow	238
White-throated Sparrow	243
Chipping Sparrow	246
Slate-coloured Junco	248
Song Sparrow. Horned Lark (coloured plate).....	<i>facing page</i> 249
Purple Martin	257
Barn Swallow	260
Tree Swallow	261
Cedar Waxwing	265
Northern Shrike	267
Red-eyed Vireo	271
Black and White Warbler	275
Yellow Warbler	280
Myrtle Warbler	282
Oven-bird	290
Maryland Yellow-throat	294
American Redstart	298
Catbird	301
House Wren	305
Prairie Marsh Wren	308

	PAGE
Brown Creeper	310
White-breasted Nuthatch	312
Chickadee	315
Golden-crowned Kinglet	318
Brown Thrasher, Wilson's Thrush (coloured plate) <i>facing page</i>	320
Olive-backed Thrush	323
Hermit Thrush	324



KEY TO THE PARTS OF A BIRD

1. Forehead; 2. Nostril; 3. Cutting Edge of Bill; 4. Under Mandible; 5. Chin; 6. Throat; 7. Angle of Mouth; 8. Lesser Wing-Coverts; 9. Greater Wing-Coverts; 10. Coverts of Primaries; 11. Primaries; 12. Front Toes; 13. Hind Toe; 14. Belly; 15. Tarsus; 16. Under Tail-Coverts; 17. Tail; 18. Upper Tail-Coverts; 19. Rump; 20. Back; 21. Side of Neck; 22. Neck; 23. Nape; 24. Back of Head; 25. Crown.

KEY TO ORDERS

For use in determining specimens in the hand.

PAGE

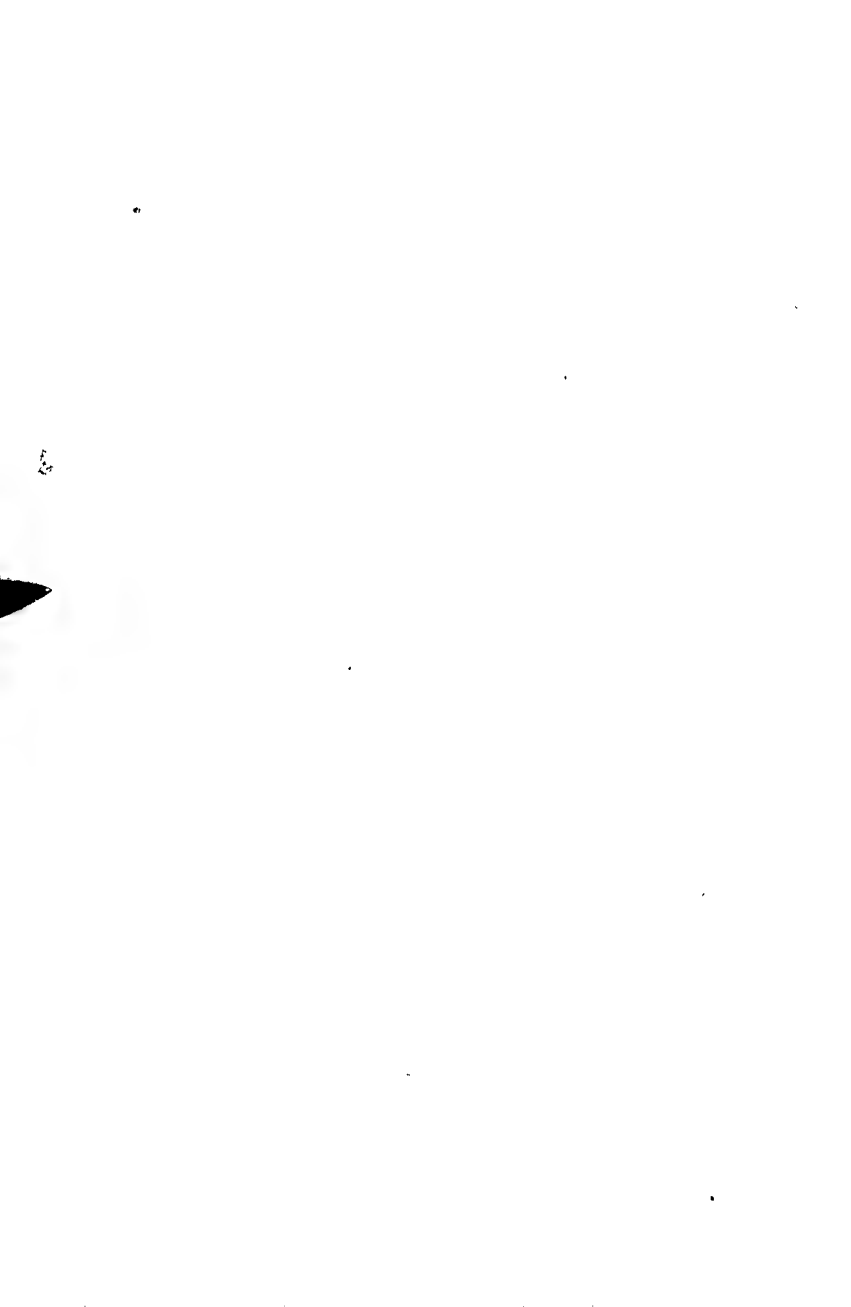
- A¹ Four toes all united by webs *Steganopodes*, 21
- A² The hind toe not united to the others by a web.
 - B¹ Bill more or less toothed or fringed along the edge.
Feet webbed *Anseres*, 25
 - B² Bill not fringed or toothed along the edge.
 - C¹ Legs inserted far back on the body so that on land the bird stands somewhat erect. Feet webbed or lobed *Pygopodes*, 1
 - C² Legs inserted near the middle of the body so that on land the body of the bird is horizontal or nearly so; or if the bird stands erect the toes are not either webbed or lobed.
 - D¹ Three toes united by webs *Longipennes*, 11
 - D² Three toes not webbed, or if so tarsus long and slender.
 - E¹ Lower portion of the thighs naked.
 - F¹ Marsh birds with the hind toe on the same level as the others, and usually with some long feathers about the head . . . *Herodiones*, 66
 - F² Marsh or water birds either large, over 3 feet long with the hind toe inserted higher than the others; or small, not more than 10 inches long, with long toes all on the same level; or duck-like with pointed bill and lobed toes *Paludicolae*, 74
 - F³ Shore birds, never more than 2 feet long, with long slender legs *Limicolae*, 83
 - E² Lower portion of the thighs feathered.
 - G¹ Bill strongly hooked and toes, except in one species, modified into talons for holding prey *Raptores*, 122
 - G² Bill not strongly hooked.
 - H¹ Hind toe small and higher on the leg than the others. *Gallinæ*, 103
 - H² All the toes fully developed and on the same level.
 - I¹ Bill with a soft, swollen region, at the base. *Columbae*, 119

- 1² Bill with no swollen region at the base,
K¹ Wing with outer joint much length-
ened; primaries and tail feathers
10; and (1) gape wide extending
beyond the bill; or (2) very small
birds with insect-like flight and
long tongue for sucking the nectar
from flowers; or (3) swallow-like
birds with the midribs of the tail-
feathers projecting as spines.
Macrochires, 176
- K² Wings with the outer joint not much
lengthened; primaries 9; and gape
not opening beyond the bill.
- L¹ Toes, 2 in front and either one or
two behind, or 3 in front, the
outer and middle joined for
half their length.
- M¹ Tail-feathers stiff, bill long and
sharp for chiseling wood.
Pici, 164
- M² Tail-feathers not stiff, bill not
adapted for chiseling wood.
Coccyges, 159
- L² Toes, 3 in front and one behind;
the middle and outer toes not
connected for part of their
length. *Passeres*, 185





PRAIRIE BIRDS



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ORDER PYGOPODES: DIVING BIRDS

Birds with the legs set far back and the feet peculiarly modified for swimming, but poorly suited for walking.

No other birds are so thoroughly adapted to living on or in the water. If the ancestors of birds were, as some think, purely water animals, then surely these are more closely related to those ancestors than any other birds. They swim or dive as naturally as seals and are quite as helpless on land. While they are good flyers, they use flight only as a means of locomotion and not as a recreation. In fact, the water is their natural element, and it is on it they pass their lives.

They are divided into two distinct groups, grebes and loons, the latter being slightly more at home either on land or in the air than the former. In fact, the grebes seem to represent the earliest type of birds, and it is with them that all bird classifications now begin.

The place of these birds in the economy of nature seems to be neutral, as they appear to do neither good nor harm. They live largely on fish but mostly on the smaller kinds, and have never been accused of lessening the supply of the fish which are used as food.

Without any tail.

Family Colymbidæ: Grebes. Page 2.

With a distinct tail of stiff feathers.

Family Gaviidæ: Loons. Page 9.

FAMILY COLYMBIDÆ: GREBES

Tail entirely absent, its place being taken by a tuft of down; and crests or "ruffs" of long feathers on the head.

In the fall the grebes lose their ruffs and are plain-coloured and unadorned, but their habits and structure will always mark them. They could be confused only with the loons, and their smaller size is sufficient to identify them.

Western Grebe: *Æchmophorus occidentalis*.

Length: 24 to 29 inches.

Description: Upper parts, including the top of the head and a line down the back of the neck, dull black with grayish markings on the back. Crest scarcely noticeable except in the breeding season when it forms a low transverse jet black ridge across the top of the head, the feathers gradually shortening backward to blend with those of the neck. Primaries brown whitening toward the base, secondaries mostly white. Under parts, including the sides and lining of the wings, pure white with a mother-of-pearl lustre. Bill and neck long and slender.

Breeding habits: Nest on a mass of dead reeds in the edge of the water, so placed that the whole rises or falls with changes in water level. The nest is merely a depression in the centre of the mass. Eggs 4 or 5, much the colour of the material on which they rest, and always covered by the bird on leaving the nest.

Season and range: A summer resident around all the larger lakes and ponds across the Canadian prairies.

This bird, from its large size and bright colouring, would attract much more attention and be much better known if the localities it frequents were more accessible. It is found in the stretches of open water in large marshes, places only reached by boat, and so is not seen by everyone. As it is seldom seen on the wing, it is only the frequenter of these watery places who ever makes its acquaintance. Its

occurrence, too, is rather local; a large number may be found in one place and no others anywhere near. This is particularly true in the breeding season, as it seems to nest in small colonies.

All the grebes are essentially birds of the water. The structure of their feet is such that they naturally offer the least possible resistance to the water when being drawn forward, and as naturally offer their broadest surface to it when moving in the opposite direction. They do not need to be taught to "feather their oars". When struggling in the hand, one of these birds will move its feet so fast that they appear to be merely a blur, like the spokes of a rapidly revolving wheel. Placed at the rear of the body as they are, they form most effective propellers.

These birds dive, too, as well as they swim, and have the power of so changing their weight that they sink suddenly from view. The western grebe, however, more often dives by a curious lunge forward, in which its body seems to rise partly from the water, describing an arc of a circle, and to follow the head rather than draw it to the depths below.

Living, as it does, out of touch with man and subsisting on low forms of aquatic animals, this bird cannot be said to be of any economic value. It certainly does no harm and it is doubtful if the quantity of insects and amphibians it destroys does much to prevent these from becoming pests. It is, however, a touch of life in what are otherwise often dreary places, and many would miss it if, along with other grebes, it should be destroyed in order that its satiny-white feathers might decorate women's hats.

Holbæll's Grebe: *Colymbus holbælli*.

Length: About 19 inches.

Description: Adults in breeding plumage: Top of head, a line down the back of the neck, and back, black; the crown often glossy and the back with grayish markings on the edges

of the feathers. Primaries and wing-coverts brown, the secondaries wholly or partly white. Throat gray extending up the sides of the head. Neck, except the line down the back, brownish-red running well down the breast. Under parts satiny-white with a grayish tinge. Bill shorter than the head and somewhat stout. Crest short but quite noticeable. Young and adults in fall plumage with little or no crest, brown colouring replaced by gray, variously marked, gray of the throat and sides of the head changed to white.

Breeding habits: Similar to the preceding except that it does not seem to nest in colonies. The eggs are a dirty white, often soiled by the material of the nest, and are always covered by the bird on leaving. They vary in number from 3 to 5 or sometimes more.



HOLBØELL'S GREBE

WESTERN GREBE

Season and range: A summer resident around lakes and large sloughs across the Canadian prairies and north to Slave Lake. Never plentiful, yet it cannot be considered rare.

This grebe so closely resembles the western in size and habits that what has been said of the one will apply equally to the other. It can easily be distinguished from the western by its slightly smaller size, its shorter bill, its crest and the reddish-brown neck. All birds, however, show their most distinctive colours only in the breeding season, and in fall or winter plumage the two appear more alike. This bird loses its crest, and its reddish neck becomes brownish-gray or even dirty white. It is never pure white below like the western. This, with the difference in the bill, should serve to distinguish the two species in any season.

No doubt both these grebes live partly on fish, but they cannot be regarded as seriously depleting the lakes. They are seldom very numerous and any fish they kill are small, so there is no reason to regard them as harmful, although fishermen often take both species in their nets.

Horned Grebe: *Colymbus auritus*.

Length: About 14 inches.

Description: Adults in breeding plumage: Upper parts brownish-black, the feathers edged with grayish. A brownish-yellow stripe over the eye and extending backward along the top of the wide conspicuous ruff; deep chestnut between the eye and the bill. Crown, chin and ruff glossy greenish black. Neck, except a stripe down the back, reddish-brown extending down the breast and along the sides. Under parts pure white with a silky lustre. Bill black, tipped with yellow.

Young, and adults in winter: Under parts dull black. Chin, throat and sides of the head pure white. Neck in front, grayish-white, the balance of the under parts white. The ruff almost lacking. Bill dark, the lower mandible whitish.

Breeding habits: Exactly similar to the preceding.

Season and range: A common summer resident around ponds and lakes across the prairie and northward.

This is the most beautiful of the grebes and is somewhat more evenly distributed throughout the prairie region than either of the two preceding. Atkinson found it along the line of the Grand Trunk as far west as Edmonton. It is a small edition of Holboell's with all the markings exaggerated, especially the "horns" and "ruff". Like the others it loses its crest and high colours in the fall, and becomes more difficult to distinguish from the next species.



EARED GREBE

HORNED GREBE

Eared Grebe: Colymbus nigricollis.

Length: About 13 inches.

Description: Distinguished from the preceding by the neck being black all around, the bill with no yellow tip, and by two long, conspicuous, yellowish-brown, fan-shaped ear-tufts, the rest of the head, including the ruff, being black.

The young, and adults in fall very similar to the preceding, but may be distinguished from the preceding by the bill which is broader than it is high at the nostrils.

Breeding habits: Like the preceding, but more often nesting in colonies, sometimes in large numbers. Eggs 8 or 9.

Season and range: A common summer resident on lakes and ponds across the Canadian prairies, apparently most numerous towards the western limit of the range.

Although in breeding plumage this grebe is easily distinguished from the preceding, the young of the two species and the adults in fall and winter are very much alike. The surest point of distinction is the shape of the bill, which in the eared is broader than it is deep at the nostrils.

While quite common in Manitoba, it is perhaps more plentiful farther west, where it is found nesting in large colonies.

Pied-billed Grebe: *Podilymbus podiceps*.

Hell-diver.

Length: About 13 inches.

Description: Adults in breeding plumage: Upper parts brownish-black. Sides of the head gray changing to brownish-gray on the neck. A broad black throat-patch. Breast yellowish-brown streaked with black, the colouring running back along the sides. Lower parts ashy gray. Bill dull bluish with a broad black band near the middle. Crest scarcely, if at all, noticeable.

Young and adults in fall or winter are brownish-black above and dull white below. Throat and sides of the head white spotted with brown. Breast and sides streaked with brown and whitish. Bill without a black band.

Breeding habits: The same as the other grebes.

Season and range: A common summer resident on ponds and lakes throughout the range, but growing less numerous towards the west.

This is the most universally distributed of all the grebes.

It may be found breeding around all the lakes and ponds across the prairie. No slough is too small, providing it has a marshy border and holds water all summer. It is the only grebe that is so generally well known as to have a popular name. The name, "pied-billed", has been given by the scientists because of the broad black band around the bill, but to the public at large it is the "hell-diver". Its slim, almost snake-like, neck and head protruding from the water, with no body visible, and its feats of lightning-like disappearance and reappearance at some distance away, make it a veritable sprite of the water, something scarcely tangible. It is a common thing for duck hunters to take a shot at it on the water, but an uncommon thing for them to hit it. It is very seldom seen on the wing, and like all the tribe, is a very poor walker. I once brought home one of these birds that had been stunned by a shot. It recovered entirely, having no shot marks about it, and would give perfect exhibitions of diving and swimming under water while kept in a tub. When taken outside and placed on the ground it would balance itself awkwardly on its feet, take a few steps, fall forward, and after using both wings and feet for a while, lie helpless. It appeared absolutely powerless to take flight from land although the wings were not injured. A peculiar thing was that, when liberated, its efforts to get away were always in the same direction, and that towards the river which was almost a mile away; and when left alone outside in its tub of water for half a day it disappeared. Whether it managed to take wing or whether it started for the river, hoping to reach it by combined use of wings and feet, no one knows.

Mitchell reports this bird as not plentiful in Saskatchewan, while Atkinson says it "was conspicuous in 1906 in every pond and marsh of any size between Portage la Prairie and Edmonton."

FAMILY GAVIIDÆ: LOONS

Birds with neither crest nor ruff and with short but distinct tail.

Their large size, brilliant colouring and loud calls make the loons well known. Although there are five species in North America, only one, the common loon or *great northern diver*, visits us or is at all well known. The red-throated, which nests across the whole of the Arctic region, may pass through at times in migration, but is seldom seen.

The sub-order to which the loons belong includes a considerable number of sea birds, among them the *great auk*, now extinct.

The Loon: *Gavia immer*.

Length: 31 to 36 inches.

Description: Back, black and white spotted. Head, throat and neck iridescent greenish or bluish-black. Under parts white, the breast streaked with black on the sides. In fall dull white below and dull black above.

Breeding habits: Nest a slight depression in the ground quite close to the edge of the water. Eggs 2, large, 3.5 inches long, grayish or greenish-brown with faint dark markings; closely resembling in colour the rocks and soil surrounding the nest.

Season and range: A migrant or summer resident of North America at large, north of the Gulf of Mexico, and breeding through the northern part of the range.

This is one of our largest and most beautiful birds, but to most people is little known. It does not breed commonly through the prairie region, although an occasional pair may be found nesting on some secluded lake.

I have seen a fully developed egg taken from the body of a female loon shot on Lake Manitoba, but the nesting site might have been far away. It seems to prefer the rocky shores of the Laurentian region, and there no lake of any size is without one or more pairs of these birds. On the dark greenish gravel, made from the breaking up of many

of the Laurentian rocks, the eggs are hard to see, and this seems to be its natural nesting place.

It may, however, be regularly seen around the larger lakes in migration, and its shrill weird note is one of the most characteristic of all bird sounds. It really has three notes, a loud tremulous call, used either while flying or on the water, a loud harsh "laugh" and a shrill long-drawn shriek. The two latter are heard only when the bird is on the water. The shrill wail often breaks the stillness of the night and may be heard for two or three miles.

In the fall and winter the loon is plainly clothed and silent. A few years ago I received a full sized male in the flesh, measuring 36 inches, which was shot over duck decoys. It is dull black above and dull white beneath, and the men who shot it did not recognize in this silent bird of dull plumage the well-known loon, which they always thought of as brilliant in dress and loud of voice.

The Red-throated Loon, *Gavia stellata*, has been reported from several places in the migrations, particularly late in the fall. "One specimen was taken on Waskana Creek, east of Regina, on Nov. 18, 1916."—Mitchell. "This bird is seen on Birch Lake, near Kelevala P.O. (between lakes Winnipeg and Manitoba) nearly every fall just before the freeze-up. It arrives here generally several weeks after the common loon and Holboell's grebe have left for the south. Only one or two seen at a time."—E. S. Norman.

It is a much smaller and more slender bird than the common loon. Its length is about 25 inches. As I write, the skin of one of these is lying before me beside that of a red-breasted merganser, and the loon is only slightly the larger and no more robust.

The colouring is dull black or brownish, finely speckled with white above, and dull white below. The adult has a triangular spot of chestnut on the throat.

ORDER LONGIPENNES: LONG-WINGED SWIMMERS

Swimming birds with wings very long compared with the weight of the body, making it possible for much of the bird's life to be spent on wing.

The only birds of this order which reach us are the gulls and terns. Although good swimmers these birds belong more to the air than to the water. Their great spread of wing enables them to fly with little exertion, and they live a great part of their lives on wing.

The gulls are larger than the terns and have rather heavy bills and rounded tails, while the bills of the terns are slender and their tails forked. Their size, the forked tails, and their habit of feeding on wing have given the terns the name of *sea-swallows*.

The gulls act as scavengers along the beaches of the larger lakes, and one species visits the fields to pick up the insect larvæ turned up by the plough. In so far as they are of any economic value, they are entirely beneficial.

FAMILY LARIDÆ: GULLS AND TERNS

Long-winged swimmers with a continuous horny covering to the beak.

Bill hooked and tail rounded on the end.

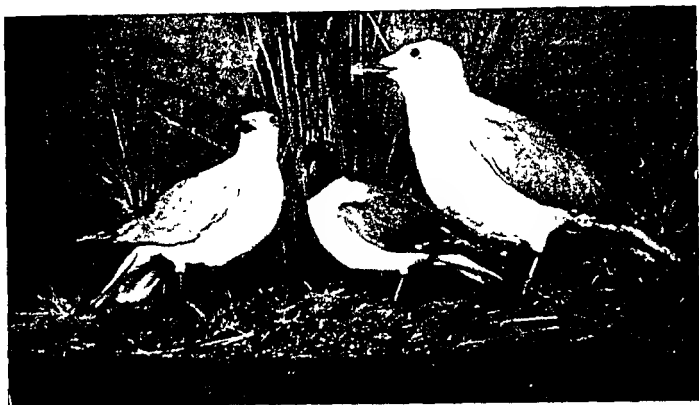
Subfamily Larinæ: Gulls. Page 12.

Bill sharp and slender, tail forked.

Subfamily Sterninæ: Terns. Page 16.



SUBFAMILY LARINÆ: GULLS.



RING-BILLED GULL FRANKLIN'S GULL HERRING GULL

Herring Gull: *Larus argentatus*.

Length: About 25 inches.

Description: Upper parts, a characteristic bluish-gray sometimes called "gull-blue". Head, under parts and tail white. Primaries black, tipped with white. Bill, yellow with a red spot on the under side during the breeding season. Legs and feet pink.

Young during the first summer and fall, dull brownish mottled with whitish. Primaries and tail black. Bill blackish, darkest toward the tip. Legs and feet dusky.

Breeding habits: Nests in large colonies on islands. The nest is a shallow hole in the ground lined with grass, in which are deposited 2 or 3 eggs, dirty white, tinted with blue.

Season and range: A summer resident, breeding from the Arctic Ocean south to southern Saskatchewan and Alberta and northern Manitoba.

This magnificent bird forms an appropriate and familiar figure in almost every view commanding a wide expanse of water. No view of the sea is complete without it, and it is quite as familiar about the large lakes. While frequently seen at considerable distance from water, it is then usually

flying high and identified only by its call; but about the water it becomes more familiar, flying low and alighting on the water or the shore, often quite easy to approach.

The ease with which these great birds fly and the time they remain on wing are among the marvels of nature's adaptation. They must fly for the pure pleasure of motion, for they may be seen long distances from either feeding or breeding localities, away high in the heavens, uttering their wild cries apparently from the pure joy of living.

Nesting in colonies as they do, their nesting places are not numerous, as a lake must be of considerable size to afford both the necessary protection and food supply for the whole colony, as well as the colonies of other gulls and terns that are usually found in the same locality. Every "Gull Lake" has been named for this bird and every "Gull Island" was supposed to be a nesting place. Colonies have been located about many of the larger lakes in Manitoba, Saskatchewan and Alberta.

The California Gull: *Larus californicus*.

This is a species closely resembling the preceding but slightly smaller. It has been detected in Alberta and Saskatchewan, but to what extent it mixes with, and is confused with, the herring gull is not yet settled.

Ring-billed Gull: *Larus delawarensis*.

Length: About 20 inches.

Description: Adults in breeding plumage: In a general way resembling the preceding but smaller. Head and neck streaked with brown. Bill greenish-yellow with a chrome-yellow tip and a broad black band encircling it at the angle. Feet greenish-yellow. The bill and feet, along with the smaller size, will always distinguish this species from the herring gull.

Young of the first summer and fall mottled with brown and white, much lighter below. Primaries and tail black.

Breeding habits: Identical with the herring gull and often nesting in the same locality.

Season and range: A common summer resident around the larger lakes across the prairie from Manitoba to the Rocky Mountains and far northward.

This bird mixes so with the herring gull that the two are often confused. In range and habits they are identical and are distinguished with difficulty except from specimens in the hand.

Franklin's Gull: *Larus franklini*.

Length: About 14 inches.

Description: Head black. Back and tail bluish-gray. Under parts white with a blush of pink. Inner webs of the primaries white with a black spot. Bill red with a black mark near the tip. Legs and feet dark reddish. Young not much different from the adults.

Breeding habits: Nests in colonies among the reeds in marshes. The nest is simply a mass of dead reeds floating in the water among the standing reeds of the marsh. Eggs usually 3, brown and white, irregularly marked with darker brown.

Season and range: A very abundant summer resident across the prairie, nesting in the marshes in any locality where reeds and water are plentiful.

This is the common small gull of the prairie. Unlike most of its tribe it leaves the water in large flocks, swarming over the country and gleaning insect food from the land. Often these birds will light on the fields and follow the plough, picking up any insects turned up. Being so numerous, the good done in this way must be considerable.

"I found this gull everywhere abundant from Portage la Prairie to Edmonton, about the sloughs and lakes or following the plough of the settler. It is a very abundant species in Manitoba, congregating in thousands in migration about the larger sloughs and small lakes, and while the bulk of

them pass north in the spring many remain to breed, and can be observed at all times feeding about the ploughed fields or following at the heels of the ploughman, fighting with the cowbirds and blackbirds for the grubs and insect life uprooted. But abundant as I have seen them in Manitoba, the numbers are exceeded abnormally further west. While driving into the Eagle hills about 40 miles west of Saskatoon on July 30, 1906, we passed an extensive mud flat and salty slough on which rested between four and five solid acres of gulls. I fired a shot into the air to note the effect and they rose as one bird in such a cloud that their wings clashed together in a frantic flapping and their discordant cries were almost deafening. It would be entirely impossible to estimate the number of birds in this flock."—Atkinson.

In the marsh at the outlet of Oak Lake, Manitoba, on the property of the Brandon Club, the Franklin gulls have nested for years. To enter this region, as I have, during the nesting period, is an experience well worth while. The birds rise in thousands from among the reeds, forming a mass of beating wings through which the sky appears only in patches, while their cries are deafening.

The nests themselves are so thick that half a dozen may be seen from the canoe at one time. In fact every clump of dead reeds, which is dense enough to carry the eggs, constitutes a nest; and a newly hatched young bird is often seen sitting beside an unhatched egg.

These birds are credited by the farmers in the locality with protecting the crops from grasshoppers. On years when the hoppers were a menace in other places the birds appeared on the fields in dense flocks and simply cleared them of the insects.

Criddle gives these gulls the credit of freeing a district of

southern Manitoba of grasshoppers when there was damage done in other places.

Bonaparte's Gull: *Larus philadelphia*.

Length: About 14 inches.

Description: Resembling the preceding but the gray of the back much paler. Bill black, slender, with a slight notch near the tip of each mandible. Feet red, the webs bright vermilion.

Breeding habits: This gull differs from all others by building its nest in bushes near the water. Where bushes are not available it will build in masses of rushes or on the ground. The eggs resemble those of the preceding.

Season and range: A summer resident with a range on the whole more northern than Franklin's gull. It breeds in isolated places across the prairie but more plentifully in the wooded region farther north, being nowhere so plentiful as Franklin's.

Bonaparte's gull is not easy to distinguish from Franklin's except when in the hand, and then often only from distinctive markings on the primaries of the adults. The young are even more difficult to distinguish than the adults, but are not often seen. The bird is only occasionally met with, and that around the large lakes.

SUBFAMILY STERNINÆ: TERNS

Caspian Tern: *Sterna caspia*.

Length: 20 to 23 inches.

Description: Back and wings bluish-gray except some white on the angle of the wing. Back of the neck and tail whitish. Under parts white. Top of the head glossy black. Bill bright red. Feet black. Tail long and forked.

Breeding habits: Nest a depression in the sand without lining; in colonies like other terns. Eggs 2 or 3, buff, streaked with brown.

Season and range: A widely distributed species, generally nesting far northward, but occurring as a rare migrant or summer resident about the large lakes of Manitoba.

The large size and the forked tail alone are sufficient to identify this tern. The only specimens I have seen on the prairie were taken by Mr. Atkinson of Portage la Prairie at Delta on Lake Manitoba, May 24, 1913. These are now in the collection in the Brandon Normal School.

In July, 1918, Professor O'Donoghue and Mr. Gowanlock of the University of Manitoba found the caspian tern nesting on Pelican Island towards the northern end of Lake Winnipeg.



CASPIAN TERN

FORSTER'S TERN

COMMON TERN

Forster's Tern: *Sterna forsteri*.

Length: About 15 inches.

Description: Back and wings gray. Under parts white. Top of the head black. The inner webs of the outer tail feathers darker than the outer. Bill and feet orange.

Breeding habits: Nest a depression in the sand containing 2 or 3 eggs, and in colonies like the other terns.

Season and range: A fairly common summer resident or visitor about the large lakes in Manitoba, but rare farther west. Probably more numerous about the northern lakes.

This bird is found wherever the common tern is plentiful in Manitoba and is hard to distinguish from it. On the

whole it is a larger bird, but the markings of the primaries and the webs of the long outer tail-feathers are about the only sure guide, and that only for adult birds. It bears about the same relation to the common tern that Bonaparte's gull bears to Franklin's.

Common Tern: *Sterna hirundo*.

Length: 13 to 16 inches.

Description: Back and wings gray. Lower parts white, slightly tinged with gray. The inner webs of the outer tail feathers white or partly white. Top of the head black. Bill red tipped with black. Feet red.

Breeding habits: Not differing from other terns. The nest a depression in the sand containing 3 or 4 eggs and always in colonies. The eggs are very similar to those of Forster's tern.

Season and range: A very common summer visitor around the larger lakes across the prairies.

The common tern is too well known to need much description. Wherever there is a lake containing fish, there the tern will be, and usually in numbers. It is one of the wonders of creation to see this bird catch a fish. The prey is located from the air and the bird poises himself on wing over it as though to locate it exactly and measure distance. Then, with a suddenness that startles the onlooker, he drops, splash, head downwards, and as suddenly rises again amidst the spray. Generally, too, he has the fish in his bill. The fish on which these birds feed are small, necessitating the repetition of this operation many times a day by the same bird, surely a precarious way of making a living.

In Manitoba, at least, the common tern is often accompanied by Forster's tern. To distinguish the two is not an easy matter. They can only be distinguished with certainty from specimens in the hand, and it is easiest done by com-

paring the long outer tail-feathers. "In the common terns the outer web of these feathers is always darker than the inner web; in Forster's tern the inner web is always darker than the outer one."—(Chapman). The wash of gray on the breast of the common tern will generally distinguish it in contrast to the pure white under parts of Forster's, but this is not always reliable.

One may be well acquainted with the terns and yet never have seen their nests. The habit of breeding in colonies prevents these being distributed evenly through the range, as only few places are suitable and these are usually somewhat inaccessible. Colonies have been located at different places across the prairies, but changes of water level and the advance of settlement cause the birds to shift their breeding grounds. Their numbers, however, indicate that they must nest regularly about the larger lakes. The young are hatched in June, and during July and August the birds scatter over the country in flocks, frequenting any places where food to suit them is found.

Black Tern: *Hydrochelidon nigra surinamensis*.

Length: About 9 inches.

Description: Head, neck and under parts black. Back and wings gray. Lining of the wings ashy-white extending around the front edge of the wing and showing on the upper side. Bill black. Feet brown with black claws.

Young of the first summer white below and marked with white mixed with brown about the head, the brown extending more or less to the whole upper parts.

Breeding habits: Eggs 2 to 4, light brown mottled with darker, deposited on masses of reeds or logs or other material in the water, with little or no attempt to make a nest. Although not forming large colonies, a number of nests are usually found near one another.

Season and range: A very common summer resident nesting either on small ponds or in the large marshes.

The black tern is more a bird of the small ponds than any of the others. In fact it is commonly called the "slough gull" in many localities. As its food is mostly insects it is not compelled to confine itself to waters where fish abound, and no slough that keeps water until midsummer is too small to shelter several nests of the black tern. When the location of the nest is approached it shows signs of great excitement, darting down so as almost to strike the intruder, and uttering its harsh alarm in a way to show both its state of mind and the nearness of the nest. I have found its nest in all parts of Manitoba and frequently seen several on a very small slough.

ORDER STEGANOPODES: TOTIPAL- MATE SWIMMERS

Swimming birds with the four toes connected by three full webs, and a pouch for storing food beneath the bill.

Almost all the members of this order are birds of the sea coast. The only representatives which visit us are the white pelican and the double-crested cormorant. These are so unlike in almost every respect that they cannot be confused, and the pelican, at least, is so large that it can never be mistaken.

They are of no economic value, their food being small fish and other aquatic animals.

Large black birds with hooked bills and very small pouch beneath the bill.

Family *Phalacrocoracidae*: Cormorants. Page 21.

Very large white birds with large pouch for food beneath the bill.

Family *Pelecanidae*: Pelicans. Page 23.

FAMILY PHALACROCORACIDÆ: CORMORANTS

Legs set far back like the divers and only very slight pouch beneath the bill.

Double-crested Cormorant: *Phalacrocorax auritus*.

Crow Duck.

Length: 30 to 33 inches.

Description: Breeding plumage: Glossy greenish-black, the feathers of the back and wings with grayish centres and

prominent shiny black shafts. Tail with 12 feathers. Two black curly crests. Bill long and hooked. Sac beneath the bill and region below and in front of the eyes orange. Eyelids and inside of the mouth blue. Bill mostly black. Feet black.

Young and adult in fall plumage: Dull black above and brownish gray below. Flanks and tail black. No crests and eyelids not blue. Sac beneath the bill red in front, yellow farther back. Bill yellow with a black ridge. Feet dull black.

Breeding habits: Nests built of sticks, and collected in colonies, either on the ground like gulls and terns, or on rocky ledges. Eggs 2 to 4, pale bluish-white.

Season and range: A fairly common summer resident around lakes across the prairie, but more common as a migrant.

The cormorant, although a bird of beautiful plumage, has an evil reputation. It is a greedy bird living entirely on flesh, mostly fish, which it catches by swimming under water. All literature abounds in references to this voracious bird as the type of all that is greedy, and the very word cormorant now means a devourer.

The charge is sometimes made that these birds consume valuable fish but there is little evidence to show that such is the case. An investigation of the feeding habits of a flock that was accused of preying upon the salmon at the mouths



DOUBLE-CRESTED CORMORANT

of some of the New Brunswick rivers, showed that the fish they ate were of little value. It is simply another instance of the tendency people have to accuse any wild bird of being injurious to man.

We see these somewhat maligned birds quite commonly, either alone or in small flocks, about the larger lakes in the spring, when they are known as crow ducks. They mostly go farther north to nest, but colonies of them are found across the prairie nesting in the same localities frequented by gulls and terns. An occasional bird may be seen any time in the summer.

FAMILY PELECANIDÆ: PELICANS

Immense birds, with pouches beneath the bill for storing food.

White Pelican: *Pelecanus erythrorhynchos.*

Length: 5 feet.

Description: Pure white, with black tips to the wings. Bill and feet, yellow or reddish. Pouch, red, orange and yellow varying with the season.

Breeding habits: Nest a depression in the sand on a rocky or sandy island, and lined with any material convenient. Generally in large colonies. Eggs 1 to 3, large, creamy-white, the shell roughened with a chalk-like deposit.

Season and range: Formerly a summer resident across the prairie but now seldom seen in the more settled parts except in migration. It still breeds about several of the larger lakes of central Saskatchewan.

These immense but harmless birds were persecuted by man in order that their huge stuffed skins might decorate some shop or office window, until they were taken under the protection of the law. They have shifted their nesting places out of the ordinary haunts of man, but we still see

them frequently in migration. I have counted as many as 200 in a single flock in the fall.

Only once have I ever seen one of these birds shot. It was just at break of day on a spring morning when goose shooting in spring was still legal. The creek was running full, level with its banks, and the canoe had covered its four miles of windings from the lodge to the lake just in time to be in position for the morning flight. At the mouth of the creek and seen through the dead reeds, there loomed up in the mist and the twilight a dozen or more huge white forms. Magnified in the mist of the morning they looked like white steamboats at a distance. I hoped they would swim out of range before the man in the bow would recover from his surprise. But no, they needs must fly. Anything that flies is game to some guns and he did its deadly work, and he carried around for the rest of the day a great mass of flesh and feathers of which he soon became tired.

They are now protected along with all other migratory birds.

ORDER ANSERES: LAMELLIROSTRAL SWIMMERS

Swimming birds with tooth-like plates, lamellæ, along the edge of the bill.

These are the well-known water fowl. No birds are better known or more highly prized. The domestic ducks and geese belong to this order and their wild kin are among the most highly valued game birds. The swan, another member, has been accepted in both literature and art as a type of graceful beauty.

While the group includes birds unfit for food, it contains none that are injurious to man, and many rank among the most valuable of all fowl.

Family Anatidæ: Ducks, Geese and Swans. Page 26.

Bill narrow with teeth showing along the edge.

Subfamily Merginæ: Mergansers. Page 26.

Bill broad and flat, hind toe with no web.

Subfamily Anatinæ: River Ducks. Page 29.

Bill flat, the hind toe webbed.

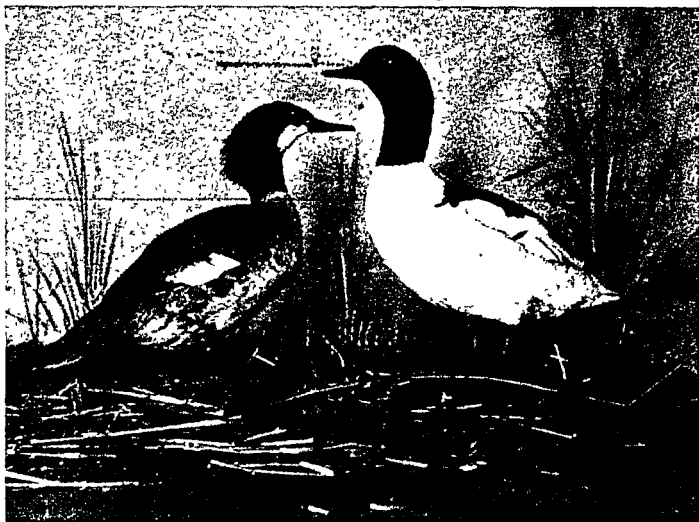
Subfamily Fuligulinæ: Sea Ducks. Page 42.

Bill higher than broad, mostly large birds.

Subfamily Anserinæ: Geese. Page 54.

Bill black, very large white birds.

Subfamily Cygninæ: Swans. Page 63.



Female

Male

AMERICAN MERGANSER

FAMILY ANATIDÆ: DUCKS, GEESE AND SWANS

SUBFAMILY MERGINÆ: MERGANSERS

Bill slender with prominent teeth-like projections along the edge, the upper mandible with a hook at the tip.

American Merganser: *Mergus americanus*.

Length: 23.5 to 27 inches.

Description: Male: Head, upper neck and back, greenish-black. No crest. Lower part of the neck and whole lower parts white or salmon pink with dark marks on the sides and toward the rear. Back shading to gray toward the tail. Wings, white or black and white toward the body, with black tips. Bill red with a black hook. Feet red.

Female: Head and neck reddish-brown, the head with a slight crest. Under parts white or slightly tinged with pink. Back gray. Wings gray at the tips and with less white on them than in the male. Bill red, dark along the top. Feet yellow with dark webs.

Breeding habits: Nests in holes in trees or under rocks. Eggs 6 to 10, creamy-buff.

Season and range: A summer resident, nesting around lakes through the more or less wooded region from northern Manitoba to the Rocky Mountains.

The mergansers are the birds known to the duck hunter as sawbills, sheldrakes or goosanders. They are not popular as game birds because their fish diet often gives a decidedly fishy flavour to their flesh. Their close resemblance to the ducks, particularly in the shooting season when they are not dressed in their finest feathers, often deceives the unwary and always the inexperienced. Many a sawbill finds its way to the "bag" and afterwards lends its flavor to the family repast.

The American goosander is not plentiful on the prairie. It is a bird of the secluded lake with wooded shores or rocky cliffs, and has to go to the northern part of our range to find a suitable dwelling place. It is, however, sometimes met with in migration.

Red-breasted Merganser: *Mergus serrator*.

Length: About 2 feet.

Description: Adult male in breeding plumage: Head and upper neck greenish-black, with a prominent crest. Back black, more or less flecked about the edges with white and reddish. Primaries black, secondaries and some of the wing-coverts white, the secondaries edged with black. Lower back and flanks white finely barred with black. Tail dark. Lower neck and whole under parts white except a band of chestnut spotted with black across the upper breast. Bill and feet dark.

Female almost exactly like the preceding but smaller. Young like the female.

Breeding habits: Nest of grass lined with feathers and placed on the ground, generally concealed under a log or bush. Eggs 6 to 12, creamy-buff.

Season and range: Mostly a migrant with us, breeding farther north.

This bird so closely resembles the preceding that the two are hard to distinguish except in full breeding plumage. It is smaller than the American, but the position of the nostril is the surest point of distinction. In the American the nostril is near the middle of the bill, while in the red-breasted it is near the base. The males in spring plumage are easily distinguished but the females are more difficult. It is not infrequently seen in the spring migration around the prairie lakes.



Female

Male

HOODED MERGANSER

Hooded Merganser; *Lophodytes cucullatus*.

Length: 16.5 to 18 inches.

Description: Male: Head, neck and upper parts black, shading to brown toward the tail. Crest large, fan-like when erect, with large white spot on the side. Under parts white. Sides more or less marked with brownish. Wing with

white speculum. Bill black. Feet light brown with darker claws.

Female: Head and neck grayish-brown, deeper on the crown. Crest smaller than in the male with no white spot. Upper parts brown shading black towards the tail. Lower parts whitish. White speculum on the wing with one black bar. Bill dark but not black.

Breeding habits: Nest mostly in holes in trees near water. Eggs 8 to 10, buffy-white.

Season and range: A regular summer resident, nesting in hollow trees in the wooded regions along the larger rivers across the prairie. It seems to prefer running water.

This is the common merganser or sawbill of the prairie lakes. It is regularly met with along with ducks in the fall migration, and the sawbill is not infrequently a part of the bag. Its food does not seem to be exclusively fish and the flesh is not wholly unfit for food—at least, it is often eaten. The male is readily recognized by his magnificent crest, but the female, dull-coloured and with comparatively small crest, is not so easily identified. Its shorter bill will distinguish it from the red-breasted or the American.

“Its centre of abundance seems to be northern Manitoba and districts toward the mouth of the Saskatchewan; here it finds dead trees and flooded grounds, which seem to be its chief requisites when breeding.”—Macoun.

SUBFAMILY ANATINÆ: RIVER DUCKS

Ducks with no web on the hind toe, and which feed by tipping head downwards to reach the bottom.

Mallard: *Anas platyrhynchos.*

Length: About 23 inches.

Description: Male: Head and throat glossy green, a white ring around the neck. Breast reddish. Belly grayish-white.

Back gray, the wings with a purple speculum bordered by black and white. Bill greenish-yellow, feet red.

Female: Plain brown or buff streaked with darker brown or gray. Bill blackish with orange blotches. Otherwise as in the male. Immature birds and males in early fall resemble the female in plumage.

Breeding habits: Nest of grass lined with feathers, on the ground, sometimes at considerable distance from water. Eggs bluish-white, generally about 10.

Season and range: A plentiful summer resident around all the lakes across the prairie, going south only when the lakes freeze over in the fall.



Female

Male

MALLARD

Next to the prairie chicken and the Canada goose the mallard is the most popular game bird in Western Canada. It is much more plentiful still than either of the other two, but even its numbers are becoming much less. This is the original wild duck from which some of the domestic varieties were derived. In fact, some of the domestic ducks are simply tame mallards grown fat and lazy with too much to eat and not enough exercise. If the eggs of the wild mallard are hatched in captivity the young will be

as tame as domestic fowl, but will have a strong tendency to migrate in the fall. Unlike many wild species the mallard will breed quite freely in captivity.

Another example of its power of adaptation is the change in feeding habits since the prairie has become settled. Although naturally a water bird it has taken quite readily to a diet of wheat or barley, and in the fall the flocks from any lake pay regular visits to the stubble fields. In its feeding habits it is partly nocturnal, and at least small flocks keep moving all night. The great movement from the lake, however, comes just at daylight, and the birds return in more broken flocks late in the forenoon.

In the struggle for existence the mallard will be hard to exterminate, but it is becoming all too scarce. The nesting places have been invaded, so that it does not now nest in large numbers about the most frequented lakes. Like many other birds it is going farther north. If the opening up of the north land by a railroad to Hudson's Bay leads to the invasion of the last sanctuary of the water fowl, we may well begin to fear that the flocks of these birds may vanish like the herds of buffalo.

Black Duck: *Anas rubripes*.

Black Mallard.

Length: About 23 inches.

Description: In size and shape closely resembling the mallard, but very dark, appearing black at a distance, and no white anywhere except on the lining of the wings and a narrow white border to the purple speculum. Feet orange. Bill greenish-black.

Breeding habits: Similar to those of the mallard.

Season and range: A rare summer resident or migrant in Manitoba, and at least two specimens reported as far west as Last Mountain Lake, Sask. It may breed farther north.

Some years ago the black duck appeared on Lake Manitoba and for a time it seemed as though its numbers were likely to increase. Mr. Atkinson gives the following history of its appearance:

"My first authentic record is that made by Mr. F. G. Simpson of this city, who collected a fine male bird at Clandeboyne marsh, south of Lake Manitoba, on Oct. 28, 1900. Early in September, 1902, a female bird was received from Delta, where it was collected by W. Burr on Sept. 4. In Oct. of the same year John Atkinson, of St. Mark's, collected two specimens, one of which, a very fine male bird, was received by myself, while a flock of five birds was seen on the same marsh by several parties that fall. In September, 1903, I received another specimen from Mr. Burr of Delta, and heard of several other records that fall, and from it conclude that the black duck has now gained a footing in the Manitoba marshes, and finding conditions favourable will increase and become one of our most abundant and not the least acceptable game birds in the future."

Unfortunately Mr. Atkinson's predictions, written in 1904, have not been fulfilled. Two of the specimens he mentions are still in his collection, now the property of the Brandon Normal School, but I have never heard of many birds being taken. I have camped at Delta on Lake Manitoba almost every summer for fifteen years, and for ten years have shot on the marshes between there and Clandeboyne in the fall, but have never taken and seldom seen a black duck, and even the professional guides have scarcely any knowledge of it. They call it the black Mallard.

We have in our collection an adult male of this species taken by Mr. G. R. Coldwell at Oak Lake on Oct. 1, 1921.

This is the common wild duck of the east and only a few

stragglers reach us. When found, its very dark colour and its resemblance to the mallard otherwise, will serve to identify it.

Gadwall: *Chaulelasmus streperus*.

Gray Duck.

Length: 18 to 22 inches.

Description: Male: Head and neck brownish-gray, much darker, with longer feathers, on the crown and back of the neck. Lower neck, back, sides and breast black with faint mixing of brown, the whole crossed by wavy bars of white, which are most distinct on the breast. Back dark, getting black toward the tail. Upper and lower tail-coverts velvety



Female

Male

Female

Male

BALDPATE

GADWALL

black. Tail quills gray but largely covered by long black coverts leaving only a border of gray. Wings gray with white speculum bordered with black which shades into chestnut-brown farther forward. Lower parts white passing to gray towards the tail. Bill bluish-black. Feet orange with dark webs and claws.

Female: Smaller than the male. Head and neck similar but not darker on crown. Upper parts and breast brown or blackish marked with the grey or brown edgings of the feathers but lacking the delicate lining of the male. Sides

brown. Under parts white, tail and tail-coverts brown, Wings brown with white edgings on some of the feathers, the speculum white bordered with black which has a tinge of green. Bill and feet dull blackish with some dull orange markings. Young: Resembling the female but an even more uniform gray.

Breeding habits: Nest of grass on ground and lined with feathers. Eggs 8 to 12, creamy white.

Season and range: A regular summer resident breeding across the whole prairie region.

The gadwall is one of the most universally distributed of all the ducks, being found in almost every part of the world. It never occurs with us in very large numbers, but is found regularly over the Canadian prairies, nesting about all the larger lakes.

Baldpate: *Mareca americana*.

American Widgeon.

Length: 18 to 21 inches.

Description: Male: Top of the head almost white, sides of head speckled with green and a green patch back of the eye. Neck, breast, back and sides reddish-brown or gray, with fine wavy markings. Wings gray with a white patch and a green speculum with a black border. Under parts white. Bill grayish-blue tipped with black. Feet bluish with dark webs.

Female: A plain gray or brownish-gray duck lighter below and darkest toward the tail. Head and neck marked with fine wavy lines. Crown dark. Bill dark above and yellow below. Feet yellowish with dark webs. Immature resemble the female.

Breeding habits: Nest of grass lined with down and better made than most ducks' nests. Eggs 10 to 12, creamy white.

Season and range: A summer resident across the prairie. It arrives somewhat later than the other ducks and seems to become rather less plentiful going west.

The widgeon, while one of our most common ducks, is not well known by its proper name. It shares with the gadwall and pintail the name of gray duck and is often confused with these species. The reason seems to be that very few get the widgeon in full breeding plumage. I have seldom seen a male with a white crown taken in the fall except about the larger lakes. The birds go south before they get their full plumage or collect on the larger sheets of water. For this reason the name "baldpate" is unknown to the duck hunter whose bag has often contained "little gray duck". On Lake Manitoba, late in October, it is often taken in fairly good plumage, but the best specimens are always seen in the spring.

The colouring of the baldpate varies more than that of most ducks with age, sex and season. It is a pretty old drake that has a purely white head, and the other markings go through all grades of variation. This lack of a single, universal and easily recognized character has kept the ordinary man who follows the duck, almost in ignorance of the existence of this bird as a distinct species.

Green-winged Teal: *Nettion carolinense*.

Length: About 14 inches.

Description: Male: Head and upper neck rich reddish-brown with a green patch behind each eye, the two meeting on the back of the neck in the long feathers of the crest. Upper parts and sides marked by wavy transverse lines. Under parts white, turning buff, spotted with black on the breast. A white crescent before each wing. Wings gray, with a black and green speculum bordered with reddish-brown. Bill black. Feet bluish-gray.

Female: Head and neck gray, darkest on the crown and shading to dull whitish on the throat. General colouring of the body brown, darkest on the breast and upper parts and marked with the lighter brown edgings of the feathers.

Lower parts whitish or buff. Wings brown with a green speculum bordered by black and reddish. A very plain little duck, always distinguished by the green speculum on the wings. Immature and males in early fall resemble the female.

Breeding habits: Nest of grass, in clumps of grass or bushes, often far from the water. Eggs 6 to 12, creamy white.

Season and range: A summer resident across the prairies but not nesting in large numbers in the settled districts.

This does not seem to be a plentiful species, particularly in the eastern part of the prairie region, but it is widely distributed and fairly common. It breeds sparingly around all the lakes but is seldom seen in as large numbers as the blue-winged. No fall passes without some of these dainty birds visiting us, but only once have I met with them late enough to be in full plumage such as they have in the spring. I was attracted to a small slough partly grown up with willows, by a curious clucking sound which was strange. The slough was covered with ducks, which on being flushed, rose from among the bushes and flew over me, evidently not having definitely located the intruder. A half dozen of the plumpest and most beautifully coloured of all our game birds went home in my bag, and although very small their flavour was quite in keeping with their beauty. I have never since seen the green-winged teal in a flock of that size, and never heard again the peculiar sound they make when together in numbers and undisturbed.

Most of the teals migrate early, leaving the prairie lakes long before the cold weather; but it is not unusual to find stragglers staying until late. Some of these are, perhaps, birds that have been wounded earlier in the season and are staying around to regain sufficient power of flight to start the journey south.

Blue-winged Teal: *Querquedula discors*.

Length: About 15 inches.

Description: Male: Head, gray with a greenish or purplish sheen, darker on the top, and a large, white, crescent-shaped patch in front of the eye. Back brown and black, much varied and getting darker toward the tail. Under parts gray with a tinge of brown forming numerous round dark spots surrounded by whitish. Wing-coverts and some of the body feathers blue. Speculum green bordered with white. Bill grayish-black. Feet dull yellow.

Female: General colouring much the same as the male but duller. No white crescent in front of the eye. The blue on the wing-coverts and most of the other wing markings the same.

Young: Resembling the female.

Breeding habits: Nest on the ground, of grass and weeds, generally quite near water. Eggs 8 to 12, a creamy-white.

Season and range: A summer resident, particularly plentiful across the whole prairie region.

The blue-winged teal is, perhaps, the most universally distributed across the prairies of all the ducks. It is found nesting around all sloughs and lakes, no piece of water being too small. I have found it quite often frequenting ditches along the railway. It nests early and the young birds are full grown earlier than most ducks. Even when it was permitted to shoot ducks in early September the teal were never found undeveloped. It leaves early, too, only the stragglers staying well into October. On this account it is never seen in full plumage in the fall, but drakes with the prominent white crescent in front of the eye are commonly seen in the spring and early summer. The size and the blue wing-coverts alone are sufficient to identify it in any plumage.

Cinnamon Teal: *Querquedula cyanoptera*.

Length: 16 to 17 inches.

Description: Male: Head, neck and whole under parts rich purplish-brown, rather darker on the crown and throat and changing to black or dark brown on the centre of the belly and backward. Back cinnamon-marked with curved brown lines across the feathers, and deepening to greenish-brown towards the tail. Wing-coverts blue. Speculum green bordered with white. The wings closely resemble those of the preceding. Bill black. Feet orange, with dark webs and joints.

Female: Very closely resembling the blue-winged but rather larger with longer bill; the under parts generally with a tinge of the colouring of the male.

Young and males in fall plumage resemble the female and are hard to distinguish from the preceding.

Breeding habits: Resembling the blue-winged.

Season and range: A rare straggler in Manitoba becoming slightly more plentiful farther west, and breeding sparingly in southwestern Alberta.

This beautiful bird is so rare that it is not often seen. In full plumage the drake is unmistakable but the duck, or the drake in late summer or fall, so closely resemble the blue-winged that they would not be distinguished by anyone not watching for them. It may be that they are taken more frequently than the records show. A pair in full breeding plumage in our collection, taken at Shoal Lake, Manitoba, in 1912, show that the species although rare may yet be looked for.

Shoveller: *Spatula clypeata*.

Spoonbill.

Length: 17 to 21 inches.

Description: Male: Head and upper neck, dark glossy green. Lower neck and breast, pure white. Belly purplish-brown. Wing-coverts blue. Back dark deepening to black on the

tail-coverts and central tail feathers, outer tail-feathers white. Speculum green, bordered with white. A white patch on each side at the root of the tail. Bill black, very much longer than the head, broad and rounded toward the tip. Feet orange-red.

Female: A general brownish-yellow with darker markings of dull greenish-brown. Feet orange.

Young and adults in early fall resemble the female.

Breeding habits: Nest on the ground in a dry place near water.

Eggs 8 to 10, pale greenish or bluish.

Season and range: A summer resident nesting freely across the whole of the Canadian prairies and north to the barren lands.

The spoonbill drake is a gay fellow, but is not often seen in his full dress clothes. Like the teals he goes south early, and any taken by the hunter are just ordinary brown ducks with no gay plumage. The size and shape of the bill are such a sure point of identification that very few look further. In the spring, however, these birds in their gayest clothes may be found on all the lakes across the plains. They never occur in very large numbers but some of them are always present.

Pintail: *Dafila acuta*.

Length: About 30 inches or less, depending on the length of the tail.

Description: Male: Head and upper neck rich brown with a gloss of green or purple. A long white stripe down the side of the neck and joining the white of the breast. Back of the neck black shading into the gray of the back. Back and sides gray, closely marked with fine wavy white lines. Speculum beautiful iridescent purple, sometimes with a tinge of bronze, and framed in reddish-brown, white and black. Entire under parts pure white. Tail-feathers gray and brown, the two central being very long and darker. Bill black with lighter tinge on edge. Feet grayish-blue.

Female: Smaller, without long tail-feathers and only very imperfect speculum. The whole head, neck and body variously streaked and spotted, but giving a general gray colour with a tinge of buff beneath. Bill dull black. Feet grayish-blue.

Young and males in early fall plumage resemble the female and are plain gray ducks easily confused with some other species.

Breeding habits: Nest of grass or weeds lined with feathers, on the ground near water. Eggs 6 to 12, pale olive green.

Season and range: A very common summer resident across the Canadian prairie region and far northward.



PINTAIL

The pintail is one of our best known ducks and the drake in full plumage is one of the most beautiful. It stays late enough in the fall to be well feathered before leaving, and this gaily dressed bird often falls to the fowler's gun during late October. It has a tendency late in the fall to flock with the mallards, and the two will be

found in the middle of the day in mixed flocks, sunning themselves on sandbars or sheltered shores. At times they visit the stubble fields together, as it is quite common to shoot pintails on the stubble, but usually they are in flocks by themselves.

The pintail has some qualities which suggest that it might be easily domesticated. It will nest about the smallest slough and often quite near farm buildings. I have seen several of these gay drakes on a very small pond so near the farm buildings that passers by took them for tame ducks.

Ducks as a whole are not noted for their grace either of form or movement. The "waddle" of the duck is proverbial, but the pintail is a graceful bird. Its clean slim shape is in sharp contrast to the usual "stocky" duck form.

Wood Duck: *Aix sponsa*.

Length: About 18 inches.

Description: Male: Top of head and large crest shining green or purple. Throat white. Lower neck and breast rich reddish beautifully marked with white. A white crescent in front of the wing. Upper parts green tinged with bronze. Speculum green. Bill pinkish-white marked with red and black. Feet orange with black claws.

Female: No crest but the feathers on the back of the neck longer. General colouring gray and brown. Bill and feet both dark.

Young: Resembling the female.

Breeding habits: Nest of grass and feathers in holes in trees, well up from the ground and near the water. Eggs 6 to 12, pale creamy-white. The old bird carries the young from the nest to the water in her beak.

Season and range: A very rare summer resident in wooded districts.

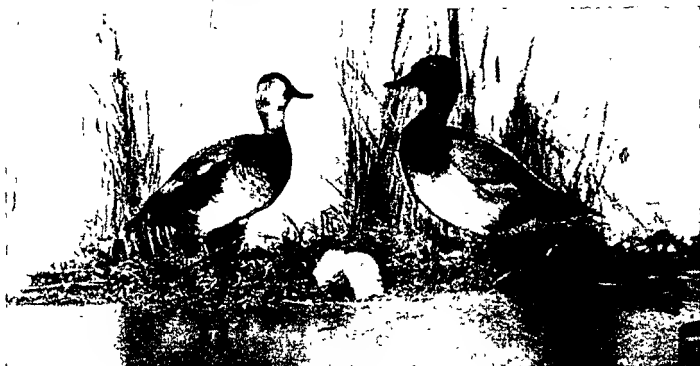
This, the most beautiful of all ducks, is so rare as to be

seldom seen. Both its plumage and habits are so characteristic that, if seen, it cannot be mistaken. To prevent extermination it has been withdrawn from the list of game birds and shooting in any season is prohibited.

SUBFAMILY FULGULINÆ: SEA DUCKS

Ducks with legs set far back and a web on the hind toe, and which get their food by diving.

Redhead: *Marila americana*.



Female

Male

~ REDHEAD

Length: 17 to 21 inches.

Description: Male: Head and upper neck, rich reddish-brown. Lower neck, breast and part of the body, dull black. Back, black and white in wavy lines, giving a silvery-gray tone at a distance. Wings gray with whitish lining and light gray speculum. Bill, not longer than the head, dull bluish with a black band at the end. Forehead arched abruptly upward from the bill; head-feathers rather fluffy but no crest. Feet bluish-gray with darker webs and black claws.

Female: Head brownish-gray deepening to a tinge of chestnut but paler on the sides of the head, throat and upper neck. Breast, back of the neck, upper back and sides brown more or less variegated with whitish. Back and tail brownish-gray; wings, bill and feet similar to those of the male. Under parts white speckled with brown toward the tail. Immature and adults in early fall plumage are dull leaden-gray, rather pale beneath and without much tinge of brown. The resemblance to the canvas-back is strong in all plumage but the shape of the bill will always distinguish the two species.

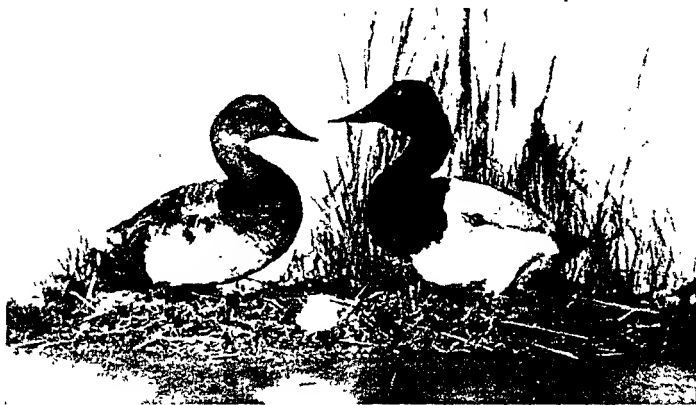
Breeding habits: Nest on the ground quite near or in the water, often a bulky structure but well made. Eggs 8 to 13, buff with a tinge of drab.

Season and range: A summer resident around all the larger lakes across the prairie.

This is one of our commonest, but not most plentiful ducks. It does not occur in as large numbers as the canvas-back, and resembles it so much that the two are often confused. It is common for hunters not to distinguish the two species in their bags. They all count as canvas-backs.

This was formerly true even in the markets of the eastern States where redheads were commonly sold for canvas-backs, and as such appeared on the restaurant tables at almost fabulous prices.

The two are easily distinguished by the shape of their heads and bills. The redhead has a comparatively short bill and the forehead rises from it abruptly, giving a high arch to the head. The bill of the canvas-back is long and slopes gradually to the top of the head. The feathers on the canvas-back's head are short and lie close, while those of the redhead are longer and give the head a somewhat puffy appearance. The redhead, too, is a distinctly smaller duck than the canvas-back.



Female

Male

CANVAS-BACK

Canvas-back: *Marila vallisneria*.

Length: 20 to 23 inches.

Description: Male: Head and upper neck dark reddish, darker toward the bill, the feathers short and close-lying. Lower neck and breast black. General body colour grayish to black, passing to whitish beneath, except the back, which is white with fine zigzag black bars narrower than the white streaks, the whole back showing white or silvery-gray at a distance. Bill long, sloping gradually to the top of the head, dull black. Feet bluish-gray.

Female: Head, neck and breast brown or gray; general body colour grayish-black. A little smaller than the male.

Young: Resembling the female.

Breeding habits: Similar to the preceding, the eggs somewhat larger and with a tinge of green rather than buff.

Season and range: An abundant summer resident and migrant, nesting around lakes across the prairie, but the majority going farther north.

This is the celebrated canvas-back of the eastern markets, supposed to surpass all other ducks in excellency of flavour.

In this respect it has been much over-estimated, as, under ordinary circumstances, it is not only not superior to all others, but inferior to some. What has given the canvas-back its reputation is the flavour imparted to its flesh by the so called "wild celery", on which the flocks feed in Chesapeake Bay and other waters of the eastern coast. As a matter of fact this plant is not celery, but an aquatic plant, *vallisneria spiralis*, with grass-like leaves and commonly known as eel grass. This plant roots in the soft mud and produces a network of white succulent stems surmounted by the mass of submerged grass-like leaves. The canvas-back is an excellent diver, and, by diving to the bottom he is able to pull up great masses of these stems, bring them to the top of the water and select the choicest and tenderest parts for his meal, the tougher parts being left on the surface.

The wild celery of the eastern coast waters does not grow in our climate, but one of the pondweeds, *Potamogeton zosterifolius*, is very similar in habit and in the structure of the submerged stems. This plant grows profusely in the mud at the bottom of many of our ponds and shallow lakes, and wherever it is found the diving ducks may be seen feeding on it. To sit for half a day watching canvas-backs, redheads and bluebills diving for this plant, bringing up in their bills the masses of white stems and chasing each other in their struggle for possession of the choicest parts, is to have unfolded a real chapter in the lives of our water fowl.

The similarity of the canvas-back and the redhead is so great that the two are often confused, but they may be easily distinguished by the shape of the head. It is not well known, however, that some confusion as to identity seems to exist in the minds of the birds themselves.

"It is a remarkable fact that the redhead and canvas-back often lay their eggs in one nest. I have never seen this statement recorded in any ornithological work. This was first brought to my notice on June 18th, 1891, when I found a nest at Long Lake containing eight eggs of the canvas-back and four of the redhead. There was considerable difference in the eggs of the two birds. The eggs of the canvas-back were larger than those of the redhead and of a different tint, being of the usual ashy green, while the four eggs of the redhead were smaller than those of the other and were of a buff-drab tint and very glossy. There was not the slightest doubt about the eggs being laid by both species. Since then my collectors have frequently found nests containing eggs of the canvas-back and redhead in the same nest. On May 20th, 1897, Mr. Baines found a nest at Crescent Lake, Manitoba, containing nine eggs of the canvas-back and seven of the redhead. The nest was built in rushes in shallow water."—Raine.

These two species mix freely and breed in similar localities across the prairies, but the redheads are the more plentiful in Manitoba. Farther west they become more scarce or even rare, while the canvas-backs occur in large numbers. On the whole, however, as a species the canvas-backs far outnumber the redheads. Hordes of them nest in the far north and return each October in great flocks, rivalled in numbers only by the mallards and bluebills. They pass on south about the middle of that month, only some stragglers remaining until the lakes begin to freeze over.

Scaup Duck: *Marila marila*.

Length: 18 to 20 inches.

Description: Male: Head, neck and front part of the body jet black, the head showing a greenish tint. Middle back

white with fine wavy black lines, somewhat as in the red-head and canvas-back. Lower parts white. Wings and tail blackish. Speculum white. Bill dull bluish-gray with a black tip. Feet bluish with darker webs.

Female: Similar to the male but more obscurely marked, the black replaced by a dark brownish tint. A white patch at base of bill.

Young and adult males in imperfect plumage resemble the female.



GOLDEN
EYE

BUFFLE
HEAD

RING
NECK

LESSER
SCAUP

SCAUP
DUCK

Breeding habits: Nest of grass in a shallow hole in the ground, near the water. Eggs 6 to 12, greenish, brownish or drab.

Season and range: A summer resident, breeding in small numbers around many of the larger lakes across the prairie, but the greater number going north.

The scaup duck is not plentiful on the eastern part of the prairie, but occurs mixed with the lesser scaup about the larger lakes, particularly northward. While not occurring in as great numbers as the lesser scaup it is still by no means rare. No year passes that I do not take this bird and see it taken, but not in large numbers. It is sufficiently unlike the lesser that the guides all know it as

distinct, yet it passes under the general name of bluebill. It no doubt nests sparingly about the larger lakes, but all the bluebills go north in large numbers. The lesser is not plentiful in the summer.

It is reported as rare or hypothetical in Saskatchewan.

Lesser Scaup Duck: *Marila affinis*.

Bluebill.

Length: 15 to 17 inches.

Description: Similar to the preceding only smaller, and difficult to distinguish from it.

Breeding habits: Similar to the preceding.

Season and range: Breeds in larger numbers than the preceding about the prairie lakes, particularly eastward.

These ducks breed in considerable numbers about all our larger lakes, the males congregating in the open water early in the summer and accepting no responsibility for the care of the young. Still, the greater number must nest farther north as they gather in immense flocks, mixed with the preceding, during migration, and are all known indiscriminately as bluebills. Sometimes these flocks, sitting on the open water, will cover acres.

They seem to prefer a mixed animal and vegetable diet, for, while their stomachs often contain water insects, they also feed freely on the stems of the pondweed along with the canvas-backs and redheads. Similarity of food, however, does not produce similarity of flavour, for the bluebill is distinctly inferior to the other two in this respect. The flocks stay until late in the fall and the birds become very fat and heavy, but their better condition and their apparently exclusively vegetable diet at that time do not make them favourites on the table.

Ring-necked Duck: *Marila collaris*.

Length: 16 to 18 inches.

Description: Male: General upper parts, breast and lower neck blackish with little grayish markings on the back. Speculum gray. Head and upper neck black with a green or purple lustre. Chin white. A chestnut ring around the neck. Lower neck and breast black. Under parts white more or less marked with black. Sides white crossed by fine wavy black lines. Bill slate-coloured, black at the end and a bluish band across the upper mandible. Feet bluish with darker webs.

Female: The black of the male replaced by brown, and less white beneath. Head reddish-brown, darker on the crown, a white ring about the eye, and cheeks and chin whitish or gray. No ring about the neck. Bill markings very dull. Feet as in the male.

Young and males in fall plumage resemble the females.

Breeding habits: Very much as in the scaup.

Season and range: A duck of very universal range, but nesting mostly far north. Rare in eastern Manitoba and also reported so farther west.

The ring-necked duck in immature plumage sometimes closely resembles the redhead, but is always smaller. Otherwise it resembles the scaups and is often classed as one. It is of rare occurrence in Manitoba, but is sometimes met with in migration.

Golden-eye: *Clangula clangula americana*.

Whistler.

Length: 17 to 20 inches.

Description: Male: Head puffy but not crested, black with a tinge of green, a large, somewhat oval white spot in front of and under the eye and reaching to the base of the bill. Lower neck, lower parts and some of the back and wings white. Remainder of the upper parts black. Lining of the wings dark. Bill black or greenish. Feet orange with dark webs and black claws.

Female: Head brown, less puffy than in the male and no white spot. Neck with a white collar. Other markings as in the male but the black replaced by brownish or gray, and the white less extensive and in parts tinged with gray.

..Young: Resembling the female.

Breeding habits: Nest in a hole in a tree up some distance from the ground. Eggs 6 to 12 or more, pale green.

Season and range: A summer resident across the prairie wherever wood and water meet.

The golden-eye is not a plentiful duck, but is fairly common in small flocks about our lakes. Its presence can always be detected, even when it is not seen, by the peculiar whistle of its wings while in flight. Its flesh has often a strong fishy taste and it is not highly valued as a game bird.

Buffle-head: *Charitonetta albeola*.

Butter Ball.

Length: 12 to 15 inches.

Description: Male: Head puffy with lengthened feathers but not exactly crested, iridescent green and purplish-black, a large white patch on each side of the head behind the eye, the two spots running together on the back of the neck. Upper parts generally black, passing to gray and even white towards the tail. Lower neck and general under parts white with gray shading toward the tail. Wings black and white. Bill bluish. Feet flesh colour with dark claws.

Female: Head not puffy and a white spot below and behind the eye. General upper parts dull black with a white speculum. Below, white, shading all around into the black of the upper parts. Bill blackish. Feet bluish-gray with darker webs.

Young: Resembling the female as do the males in moulting plumage, but the females are much smaller than the males.

Breeding habits: Nest in holes in trees, or, in places where trees are not available, in holes in a bank. Eggs 6 to 12, dull buff, more round than most duck eggs.

Range and season: A summer resident around lakes wherever there are trees for nesting, and in south-western Saskatchewan it is even found nesting in holes in the banks where there are no trees.

The buffle-head drake in full plumage is one of our most beautiful ducks, while his diminutive and plain-coloured mate is not at all attractive. We do not often see the full-plumaged birds in the fall, but one is occasionally taken. In the plain plumage of the female, however, the birds are not at all uncommon. They are not valued as game but are often shot, being sometimes mistaken for bluebills. They occur in small flocks, and if one bird is shot and drops suddenly, the whole flock will follow it down and often light on the water where it falls. I know no other duck that does this.

The female buffle-head is so small that she sometimes uses the deserted hole of a flicker for nesting, and can pass through a hole not much more than three inches in diameter.

American Scoter: *Oidemia americana*.

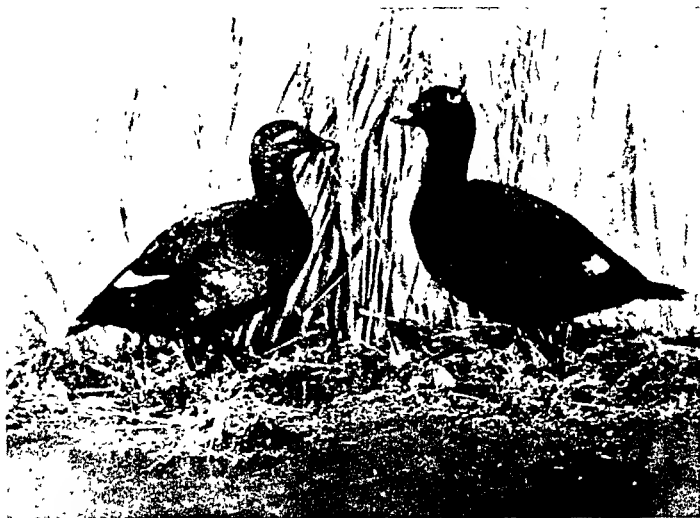
Length: 17 to 21 inches.

Description: Very closely resembling the next species, but smaller and lacking the conspicuous white speculum on the wing.

Breeding habits: Similar to the next.

Season and range: A migrant nesting on the west shores of Hudson Bay.

The American Scoter is not altogether rare as a migrant across the prairie, but is seldom distinguished from the white-winged.



Female

Male

WHITE-WINGED SCOTER

White-winged Scoter: *Oidemia deglandi*.

Length: 19 to 23 inches.

Description: Male: General colour black or brownish-black, with conspicuous white speculum and a small white crescent below and behind the eye. Bill, large and swollen on the top, black at the base and along the edges, sides of upper mandible red, top white and tip orange. Lower mandible black, white and red. Feet reddish-orange with black webs and joints.

Female: Similar in general colouring to the male but more uniformly brownish-black and lighter about the head and below. No white spot below the eye but a pale area both in front of the eye and behind it, and slightly lower. A conspicuous white speculum. Bill less swollen than in the male and all dull black. Feet similar to the male's. Young and adults in early fall plumage similar to the female.

Breeding habits: Nest a depression in the ground lined with grass and down. Eggs 8 to 11, pale buff. A late breeder, not nesting until June.

Season and range: A common migrant and less common as a summer resident around lakes across the whole prairie region. It breeds mostly farther north.

This big black duck with a Roman nose is common in migration, but breeding records are not plentiful. I have seen it in many places in June and July but never found its nest. It is useless as a game bird and not particularly ornamental, but still one would miss it. There is a vigour and a suitability for its watery surroundings that gives one a sense of the fitness of things. Even the ungainly scoter has a place.

Ruddy Duck: *Erismatura jamaicensis*.

Length: 15 to 17 inches.

Description: Male in full plumage: Neck, upper parts and sides, rich brownish-red; lower parts and sides of head white; crown and nape glossy black; wings and tail blackish, the tail-feathers stiff and rather naked at the base; bill light blue.

Female, young and male in fall plumage: Brownish above and paler below; a very dull colouring.

Breeding habits: Nest, a bulky structure in reeds and tall grass, in water on the edge of lake or slough. Eggs 6 to 10, creamy-white.

Season and range: Summer resident.

The ruddy, so beautiful in his full dress, is only seen in that plumage in the spring. Generally we see them as most dull-coloured birds, singly or in twos or threes, swimming ahead of the canoe, with their stubby tails set up almost at right angles to their backs. They are more likely to dive than fly, and their flight is weak and ungraceful.

Ruddies are common but not numerous on the lakes across the prairies, and are not valued as game. It is not an uncommon thing to find the eggs of the bluebill, red-head or canvas-back in the ruddy's nest.

SUBFAMILY ANSERINÆ: GEESE

Semi-terrestrial birds, with shorter bills, longer legs and less flattened bodies than the ducks, mostly vegetable eaters and the sexes similar in colour.

Snow Goose: *Chen hyperboreus*.

Wavey.

Length: 27 to 31 inches.

Description: Pure white-with black tips on the wings and a shade of brown about the head. Bill and feet red. The young are pale grayish about the head, neck and upper parts.

Breeding habits: Nest a depression in the sand and lined with down. Eggs 5 to 7.

Season and range: An abundant migrant across the prairies.



SNOW GOOSE

This is the well known wavey, which comes to us in immense flocks in the spring, stays around for a few weeks and then disappears into the unknown northland. While here these birds spend their nights and a considerable part of the day on the water of the larger lakes. Every morning just about daylight they go out in successive flocks to feed on the stubble left over from

the fall before. Towards noon they troop back to the lake, or, if undisturbed, they may spend the middle of the day on some small sloughs. They go out to feed again about four o'clock and return to the lake at dark. In the fall the flocks return, this time having a large percentage of young birds, which are pale gray rather than pure white.

While the waveys are not the most highly prized among the geese as table birds, they are certainly the most numerous. The flocks now are not so large as formerly, but this may be partly accounted for by the spread of grain fields over the prairies. The feeding grounds have been much extended, which may have caused some shifting in their lines of migration. As a rule the white geese fly higher and are more wary of decoys than the gray, and are more likely to survive, so far as the struggle with the hunter goes.

What is more to be feared than the man in the goose-pit with his flock of decoys, is the invasion of the nesting region of the geese. The building of the Hudson Bay railway gives an entrance to what has long been a sanctuary, and how this will affect the future of the geese depends on how they are protected.

No greater bedlam could be imagined than that caused by the immense flocks of these geese when congregated on a rather small lake. Sitting on the water, they look at a distance like banks of snow, and the noise is simply bewildering. The waveys are the most noisy, and with the exception of the white-fronted, the least musical of all the geese. When listening to the roar caused by so many voices, which mingle but do not blend, it is hard to realize that no one goose is contributing very much. Each bird gives a single squawk and stops for some time before repeating it. The number of birds necessary to produce so much noise must be very great. The sound may die down

late at night, but is resumed as soon as day begins to break. About sunrise the first flocks begin to leave for the feeding grounds, and soon the flight becomes a continuous succession of flocks, following each other like white-crested waves and making such a noise, that to speak to a person near you, it is necessary to raise your voice considerably. A flight of this kind may last one or two hours and spread over a quarter of a mile of lake shore.

Both on leaving and returning to the lake the white geese have learned to fly high, so that no big bag can now be secured under one of these flights. It is one of the most beautiful sights in nature to see the flocks come in, and when well over the lake suddenly descend, each bird tipping first to one side and then to the other, until it finally plunges into the water, the sun glistening on their snow-white feathers, and their wild jargon filling the air with discordant sounds. There are two forms of snow geese, the greater and the lesser. In colouring and habits they are identical, but they differ in size, and while the flocks mingle each form has a tendency to keep to itself. Any specimen under 27 inches may be considered the lesser.

Blue Goose: *Chen caerulescens*.

Length: 25 to 28 inches.

Description: Head and upper neck white. Lower neck and breast gray, changing to whitish on the under parts. Wings bluish-gray, some of the feathers edged with white giving a streaky appearance. Bill and feet pink. Young similar, but the head grayish-brown instead of white.

Breeding habits: So far as known similar to that of the snow geese.

Range: A common but not plentiful migrant in Manitoba, but reported rare farther west.

This goose was for a long time regarded as a doubtful species. Some thought it was the young of the snow goose,

although how such an opinion could be held for long seems hard to understand. It is not plentiful enough, and besides every flock of waveys contains numerous young in a different plumage from the adults. It does, however, associate so closely with the white geese, that for that reason alone it seems to have been regarded as one of them. In any large flock of white geese which is close enough, one or more dark birds may



BLUE GOOSE

be seen. Sometimes there may be a considerable number, but they seem to show little or no tendency to separate themselves. These are the blue geese and their numbers are always small compared with the white.

Their nesting habits are little known, but they are said to frequent the shores of Hudson Bay in nesting season and their eggs have never been found.

Ross's Goose: *Chen rossi*.

Length: About 21 inches.

Description: In colour similar to the snow geese but with numerous small papillæ at the base of the bill.

Breeding habits: Unknown.

Season and range: A rather rare migrant on the western part of the prairie region, only accidental as far east as Manitoba, and nesting in Arctic regions but the exact location unknown.

This rare and very peculiar goose was first discovered by the Arctic explorer, Samuel Hearn, about 1770, and des-

cribed in the original edition of his "Journey" which was published in 1795. Hearn called it the "Horned Wavey", and referring to it he says: "This species is very scarce at Churchill river and I believe is never found in any of the southern settlements, but about two or three hundred miles to the northwest of Churchill I have seen them in as large flocks as the common wavey or snow goose."

The species remained unknown from that time until 1861, when Mr. Bernard R. Ross, of the Hudson's Bay Co., sent some specimens taken on Great Slave lake to the Smithsonian Institution in Washington, D.C. From these specimens it was named after Mr. Ross.

This goose is reported to be a regular, although not abundant migrant through Alberta, where it is known as the "Little Wavey", and Atkinson reports that on Sept. 20, 1902, a specimen was taken at Portage la Prairie, Manitoba. The latter record, however, may be regarded as purely accidental, although there are several other records of its occurrence in the province.

It is very easy to distinguish this goose from either of the other waveys, as it is about the size of a mallard duck, and the peculiar pimply region at the base of the bill is unmistakable.

White-fronted Goose: *Anser albifrons gambeli*.

Laughing Goose.

Length: 27 to 30 inches.

Description: Head and neck gray, in places tinged with brown.

Under parts whitish. Breast irregularly spotted and blotched with black. A band at the base of the bill and some feathers about the tail white. Bill mostly pink. Feet yellow with paler webs and white claws. The young are more brown than the adult and have no white face.

Breeding habits: Nest a depression in the sand, lined with grass

and down and placed in various locations, but always near the water. Eggs 4 to 7, dull white.

Season and range. An abundant migrant in Manitoba and eastern Saskatchewan, more rare farther west, and breeding throughout the whole region west of Hudson Bay and north to the Arctic Ocean.

This is the well-known "Laughing Jack", so called from a peculiar combination of notes heard from a flock in flight. In habits it does not differ materially from the other geese, but unless the flocks have been disturbed, it does not mix with the waveys as the blue goose does.



WHITE-FRONTED GOOSE

Canada Goose: *Branta canadensis*.

(See Frontispiece)

Honker.

"To know the Canada goose is to love him forever.
You cannot show me any of his actions that one need
be ashamed of, not one."

JACK MINER.

Length: About 3 feet.

Description: Head and neck black, with a broad white patch on the chin and reaching up behind the eye on each side. General colour gray or brownish-gray paler beneath. Tail black. Upper tail-coverts and feathers in front of the tail on the lower side white. Bill and feet black.

Breeding habits: Nest of grass lined with down, and placed on the ground near the water, or on anything which rises above the water. It is reported from Alberta as laying its



HUTCHINS'S GEESE IN STUBBLE

eggs in deserted hawks' nests in trees. Eggs 4 or 5 or even more, dull white.

Season and range: A common migrant and formerly a summer resident, still perhaps nesting in remote places about the prairies, but the flocks as a whole going farther north.

This is the common "Wild Goose" and easily the most popular game bird in Canada. Formerly this magnificent bird occurred in very large numbers during migration, and nested freely on islands and around the larger lakes across the whole prairie region. With the advent of the settler and the shotgun, the number remaining to breed gradually lessened, until now it is only in very isolated places that an occasional pair may be found. Of late years even the migrating flocks have become smaller, whether from depletion or diffusion is not clear.

In the fall of 1901, I shot my first goose out of a small flock of Canadas which the farmers said had been hatched at Oak Lake, Manitoba. These birds had been around the lake and were regularly seen by people living in the vicinity, from the time the young birds were able to fly. It is now some years since a pair has been known to nest there,

and the migrating flocks are much smaller than formerly.

In the time of seeking national emblems, why not choose this bird to represent Canada? If anyone thinks it would not do credit to his intelligence to be represented by a goose, let him try to outwit a flock of these birds under the leadership of an experienced gander. It is true that a few young birds will occasionally blunder almost against your gun, but the well organized flocks are much better led. It is more universal, more plentiful, more widely known, and in many respects more "kingly" than the much vaunted eagle, which so many nations are fond of displaying on flags, shields and coins. Then too, by common consent the name Canada has been attached to it, and with a "League of Nations" seeking to establish the reign of universal peace, the adoption of such an emblem might be taken as an indication of our peaceful intentions.

Hutchins's Goose is a sub-species of the Canada and differs from it only in size, its length being from 25 to 30 inches.

This sub-species was for a long time confused with the Canada goose, and it is more than likely that at least some of the apparently lessening numbers of the latter species is due to the more general recognition of the Hutchins's as distinct. It is much more plentiful than the Canada, from which it is distinguished only by its smaller size. Like the Canada it flies rather low and is more easy to decoy than the wavey. Nuttall says that in their breeding localities the Canada frequents the fresh water lakes of the interior and is a vegetable feeder, while the Hutchins's stays about the sea shore and lives largely on animal food. In voice they are very distinct from the Canada goose or "honker."

The Cackling goose is a still smaller form but it is a western coast bird and only accidental on the prairie. It

is most likely to be found towards the western limits of the range.

Brant: *Branta bernicla glaucogastra*.

Length: About 24 inches.

Description: Head, neck and fore part of the body black. Lower breast gray shading to white about the tail. Upper parts brown or blackish. A small patch of white streaks almost surrounding the neck. Bill and feet black. The young similar, but more brown, and the neck patch of white small or wanting.

Breeding habits: Nest on the ground, of grass lined with down. Eggs 4 or 5, creamy-white.

Season and range: An eastern species nesting on the coast of Greenland and adjacent islands, as well as on the north-eastern mainland. Migrating along the eastern coast and, accidental, west to Manitoba.



BRANT

The term "brant" is often applied by hunters to any small goose, and is very frequently used when referring to the white-fronted. Very few, however, have ever seen the real brant on the prairie, but there is good reason to believe that it is occasionally found. The A. O. U. check list says it "has been recorded in the interior from Manitoba," and Macoun's Catalogue of Canadian Birds says it is occasionally

seen in Manitoba, but not to the west of that province.

Some years ago I was told by a man who knew the bird well on the eastern coast, that he had seen two undoubted specimens shot in south-western Manitoba the previous fall. Not knowing the species to be rare he had not preserved the specimens. Similar reports are frequently heard, but are not supported by specimens.

Speaking of the occurrence of the Brant in Manitoba, Mr. Geo. E. Atkinson says:

"The only record I am able to locate authentically is the specimen in my collection, which was taken by an Indian at Oak Lake in the spring of 1889, and being recognized as a rarity, was mounted by himself and subsequently secured by the late Geo. Grieve, from whom I secured it in April, 1901."

This specimen is now in our collection in the Brandon Normal School, and, so far as I can discover, is the only existing specimen of this species taken in the province.

SUBFAMILY CYGNINÆ: SWANS

Very large, graceful swimming birds with long necks and a strip of bare skin extending from the bill to the eye.

Whistling Swan: *Olor columbianus*.

Length: About 4 ft. 6 in.

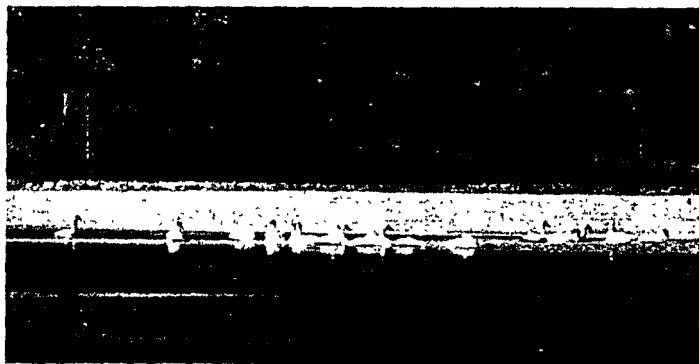
Description: Plumage of both male and female white, but may have a wash of rusty on the head; bill usually with a yellow spot in front of the eye; tail-feathers mostly 20; feet and bill black.

Breeding habits: Nests in the far north; eggs 2 to 7, about 4 inches long, dull white stained with brownish.

This great bird is only seen with us during migration, when it is not uncommon in small flocks about the larger

lakes. Rather unfortunately when on the water it is not very timid but will allow a boat to come quite close before taking flight. This often results in its being killed by the person to whom a bird, particularly a large one, only exists to be shot. The remoteness of its breeding location, however, will likely prevent it following the trumpeter swan into near extinction.

In the fall of 1925 a flock of about 150 of these birds spent several days in the Assiniboine river about fifteen miles east of Brandon.



By courtesy of the National Parks Branch.

THE LAST TRUMPETER SWANS IN THEIR NATURAL SURROUNDINGS

Trumpeter Swan: *Olor buccinator*.

Length: Five feet or more.

Description: Pure white, with black bill and feet. No yellow spot on the bill, sexes alike, but the young grayish and rusty about the head.

Breeding habits: Nest on the ground, eggs white.

Season and range: Formerly nesting from the latitude of Indiana and Missouri to the Arctic Ocean, and from the Rocky Mountains to Hudson Bay and the Great Lakes. Now almost extinct, only one small flock known.

This, the largest of American birds had the misfortune to have its breeding ground largely within the part of the continent frequented by man. That, along with its immense size and the fact that swans are not as wary as many birds, seems to have brought about its destruction. At no time since records have been kept has it been plentiful, but of late it was feared that it had already become extinct.

Recently a small flock has been discovered wintering in a remote part of the Canadian west, and the Canadian National Parks Branch of the Department of the Interior has appointed a special guardian to look after them. Every thing possible is being done to preserve, and, if possible, increase this remnant of what was once an abundant species. The location of this flock is not made known to the public.

"When a motion picture, showing nineteen of these birds on their wintering ground, was taken in 1919-20, it was considered, upon the completion of the film depicting these wild "Trumpeters" in their native habitat, that an invaluable record had been obtained, should our worst fears be realized and these last scions of a noble line disappear. A copy of the film was presented to the United States National Museum, by the Government of Canada, and it was exhibited there at the Annual Meeting of the American Ornithologists' Union, in November, 1920."

"It is hoped that the enforcement of the provisions of the Migratory Bird Treaty, in both Canada and the United States, together with the co-operation of the general public, may possibly preserve the Trumpeter Swan."—H. Lloyd, National Parks Branch.

From time to time we hear from men who frequent the marshes that they have seen swans that were not the ordinary whistler. These are never authenticated and cannot be trusted, but it is possible that there are still a few that pass through in the regular migrations.

ORDER HERODIONES: HERONS AND BITTERNS

Large wading birds with very long legs and neck, and the head ornamented with plumes or crests during the breeding season.

This is a family which in many ways is well known. It includes the European stork, which has become semi-domesticated about cities, and which has found a place in both art and literature. On this continent some more southern species have been much sought after by plume hunters, as their feathers were used in decorating ladies' hats. One species was almost exterminated before the law intervened, while another suffered severely.

Since the sale of their plumes has been forbidden the birds are of little economic value, except as scavengers to keep frogs and reptiles in check, as they live largely on small aquatic or semi-aquatic animals.

FAMILY ARDEIDÆ: HERONS AND BITTERNS

All the toes on the same level.

Bittern: *Botaurus lentiginosus*.

Length: About 28 inches, but extremely variable.

Description: Upper parts brown variously marked in different shades. Throat white with a brown streak down the centre. A black patch on each side of the neck. Breast yellowish-brown streaked with white. Belly buff. Bill black above and yellowish below. Legs yellowish-green.

Breeding habits: Nest of reeds on the ground in marshy places. Eggs 3 to 5, grayish-brown.

Season and range: A summer resident around marshes across the prairie.

The bittern is a well known bird, being quite plentiful wherever marshes are found. It has a peculiar habit of standing rigidly erect with bill pointing upward when anyone approaches. In this attitude it so closely resembles the reeds amongst which it is found that it is easily overlooked. When assured that it cannot escape attention it flops into the air with a sort of squawk, seeming a very ungainly mixture of legs and feathers. But the bittern's greatest claim to fame is through his voice. Such an absurd combination of notes, variously interpreted as pumping or driving stakes, would bring notoriety, at least, to any bird.

In the economy of nature no doubt this unlovely bird has some value, but in the hearts of mankind he has but little place. In appearance, voice and habits he repels more than he attracts. Almost every popular name savours of contempt. The best we can say about him is that he does no harm and perhaps does some good. His frequent meals of frogs, snakes and the like may prevent these becoming pests, and at least nothing highly useful is being consumed.

To one who likes the marshy places, who does not shudder at the touch of a snake or a frog, and to whom a cat-tail is as much a thing of beauty as a rose, to such the bittern makes his appeal. There is something fascinating in this solitary bird, simulating his surroundings that he may be left the more lonely, pursuing his unattractive fare in unpleasant localities, and finally giving vent to his emotions in the most grotesque sounds any bird has ever uttered.

Least Bittern: *Ixobrychus exilis*.

Length: 11 to 14 inches.

Description: Male: Crown, back and tail greenish-black. Other

upper parts reddish or yellowish. Lower parts brownish-yellow and white. Bill yellow below and dark above. Legs green with a yellow streak down the back.

Female: The black of the upper parts mostly replaced by a rich chestnut. The young resemble the female.

Breeding habits: Nest of dead rushes, slightly raised from the ground and concealed by having the green reeds bent over it. It may even be in a bush. Eggs 3 to 6, white with a pale greenish tint.

Season and range: Reported as breeding in southern Manitoba and southern Saskatchewan.



LEAST BITTERN

The least bittern frequents the tangled rushes and cat-tails in wet marshes, resembling in its habits the rails more than the herons. Its occurrence in the prairie provinces seems to be confined to the southern parts.

There are several records of the bird from Manitoba but the only specimen I know of that was taken here is the one in the Brandon Normal School collection. It was picked up in Portage la Prairie during the fall migration in 1923, having been injured by flying against the telephone wires at night.

Great Blue Heron: *Ardea herodias*.

Length: 42 to 50 inches.

Description: Adult male and female in breeding plumage: Forehead and middle of the crown white; sides of the crown



GREAT BLUE HERON

black, the two black areas joining at the back of the head, ending in a long black crest with two very long feathers. Chin, sides of the head and throat white with a line of white streaked with black running down the front of the neck. Neck gray with a tinge of purplish, and long drooping gray and white plumes covering the breast. Upper parts bluish-gray more or less-streaked with white. Wings gray with black on the tips and at the angles. Thighs and the fronts of the wings reddish. Under parts black and white variously distributed. Bill black above and yellow beneath. Legs yellowish above, and black from the joint to the feet. Feet black with yellow soles. Immature and mature in late summer: crown all black with no feathers. Front of neck black and white streaked, extending down over breast and belly. The other colouring much as the mature bird but less pronounced.

Breeding habits: Nest of sticks in trees and collected in immense colonies. Eggs 3 to 6, pale greenish-blue.

Season and range: A summer resident in suitable places, but ranging over the whole prairie region.

This great bird, when seen standing motionless on its stilt-like legs at the edge of some pond, may be said to have made ungainly proportions attractive. When shot, the dead limp body is a most shapeless combination of legs, neck, bill and very loose feathers; but when standing alert in the shallow water, with an immediate back-ground of rushes and cat-tails, the whole backed by the fuller and darker green of the wood and reflected in every detail from the water, then the blue heron is a part of his surroundings, and to the charm of beauty is added a wonder at the various kinds of perfection found in nature's handiwork. So strong has this appeal been, that artists through all ages and in all countries have conventionalized and idealized the heron as a thing of beauty.

This heron is not plentiful throughout the prairie but is very universal. It nests in secluded wooded regions in large

colonies and ranges long distances in search of food. Seton's description of a heronry found in the Riding Mountains in 1880 gives a good idea of its nesting habits.

"We had struck a heronry; hundreds of these birds were passing to and fro, and, on going forward a hundred yards or so, we found the tops of the poplars covered with their nests, the young birds, full grown but not able to fly, perched on the highest trees. The nests were made of the small dead branches of the poplar and were placed as near the tops of the trees as possible. These mountains are full of small ponds and deep marshes which swarm with lizards and small fish, on which the herons feed. On getting to an open space near the heronry we could see the old birds coming and going in every direction. Those coming home were stuffed to the bill with food for their young, making them present a very ungainly figure, as they lazily flapped their way towards the woods."

Whether useful or not, this bird is certainly harmless. Its food is similar to that of the bittern, and it may well be that this type of bird performs useful service in lessening the numbers of reptiles and amphibians. Why anyone should shoot any of the herons is past comprehension. Yet it is often done, but not by the true sportsman. The man who takes his enjoyment out of the outdoor life and the opportunity of matching his skill against that of the flying bird, rather than out of the bulk of flesh and feathers he can carry home, is usually careful of all wild life. It is the novice, who rents a gun and goes out on a holiday, who leaves in his wake a trail of wanton destruction.

Black-crowned Night Heron: *Nycticorax nycticorax naevius*.

Quawk:

Length: 23 to 26 inches.

Description: Crown and part of the back greenish-black. Upper



BLACK-CROWNED NIGHT HERON

parts, wings and tail, pale bluish-gray. Sides of the head, forehead and a line down the front of the neck, white. Under parts whitish-lilac. Long plumes from the head white. Bill black. Legs yellowish. The young and the adults in moulting plumage are brown more or less spotted or streaked with lighter colours and have no head plumes. They resemble the bittern in colour and are often mistaken for it. The heavy black bill is a good point of distinction.

Breeding habits: Nests in trees and collected in heronries as in the preceding, when trees abound. Across the prairie it usually nests in the reeds of the larger marshes, fixing its nest to reeds above the water.

Season and range: A summer resident, quite common about the large marshes in Manitoba and Saskatchewan, but not reported from Alberta.

This bird is more common than is generally supposed. In the daytime it frequents remote marshy places where few people intrude upon it, and so is seldom seen. When flying at night it is very often taken for the bittern, particularly in its brown plumage. The characteristic call "quawk" should be sufficient to identify it.

I have put up more than a dozen of these large and beautiful birds in about an eighth of a mile of shore-line on Lake Manitoba. They gather along the lake shore just after dark to watch for frogs or small fish, and when approached flap away with a "quawk" to settle again only a few hundred yards away. They are quite tame and seem to be very little molested by man, as I have never seen one shot.

ORDER PALUDICOLÆ: CRANES, RAILS AND COOTS

This is an order which cannot be defined because its members do not conform to any single type. They are wading birds which differ from both the herons and the shore birds, but the various members have little in common. They are placed in the same order merely as a matter of convenience. Coues calls the order a "house of refuge" and says he wishes he could say "house of correction."

Large birds with long legs and bills; the adult with part of the head naked; the hind toe higher than the others.

Family Gruidæ: Cranes. Page 74.

Marsh birds, the feet never webbed.

Family Rallidæ: Page 78.

Small birds with long toes on the same level.

Subfamily Rallinæ: Rails. Page 78.

Duck-like birds with sharp bills and lobed toes.

Subfamily Fulicinæ: Coots. Page 81.

FAMILY GRUIDÆ: CRANES.

Very large birds with long legs, necks and bills, resembling in structure the larger herons, but differing in having heads at least partly naked. They are birds of the open places and very wary, flying high and keeping a good look out when on the ground. The nests are placed on the ground and mostly in very accessible places, so must necessarily be away from civilization. They are said to live to a great age, and are valuable only to a very limited extent as game birds.

Whooping Crane: *Grus americana*.

Length: 50 inches or more.

Description: Adult pure white with black wing-tips. Bill greenish, 6 inches long. Head naked, except for a few black hairs for some distance back from the bill, the naked skin dull red. Legs black. Young whitish varied with brown and the head all feathered.

Breeding habits: Nest a bulky structure of grass on the open ground. Eggs 2.

Season and range: A rare migrant or more rare summer resident in remote districts.

Formerly this, the largest and most beautiful of the cranes, nested on the prairies all the way from Illinois and Iowa northward. Being a very large bird of beautiful plumage it was so persecuted that it has now become almost extinct. Owing to its weight it cannot rise at once from the ground but must use both legs and wings until it is able finally to launch itself into the air. It rises after the fashion of an aeroplane. This made it possible for a man on horseback to get very close before the bird could take wing, and advantage was taken of this to hasten its destruction. The plumage had a market value. It is now illegal to kill these birds but there are few left. One in our collection was taken near Brandon in 1890.

Little Brown Crane: *Grus canadensis*.

Length: About 3 feet.

Description: Exactly like the next species but smaller, the bill 4 inches long or less.

Breeding habits: Nest a mere depression in the ground, in grassy but not marshy places, and lined with grass. Eggs 2, gray spotted with brown.

Season and range: A migrant, nesting well to the north.

This bird may be seen more frequently than we know as it is seldom distinguished from the next species. All are

called "sandhill cranes". That it occurs in migration in Manitoba is certain. One in our collection was taken near Portage la Prairie May 5, 1898, out of a flock of five. It is a male with the head still feathered, but the area which would be naked in the mature sandhill crane, is covered with shorter feathers. Mitchell regards it as hypothetical in Saskatchewan and much fuller information is necessary to settle the respective ranges of this and the next species. The two species are so much alike that it is only by measurements that they can be distinguished. On the whole the little brown crane seems to be more northern and to nest in drier locations. Most of the nests that have ever been reported, except by northern explorers, are those of the sandhill crane. The following account by Nelson tells how he found the brown crane nesting along the Yukon river in Alaska:

"As a rule this species is not seen on the lower Yukon until about May 7th or later, when the ground is half bare and the cranes can search every hillside for last year's heath-berries, which, with an occasional lemming or mouse, constitute their food at this season. The site for the nest is usually on grassy flats, where the drier portions or the slight knolls afford them suitable places. The spot usually has an unobstructed view on all sides, and it is common to see the female's long neck raised suspiciously at the appearance in the distance of anything unusual. The nest is frequently a mere hollow in the ground, and is commonly lined with more or less coarse grass-stems and straws. In one instance a nest was found on a bare flat and was lined with a layer of straws an inch deep, all of which must have been brought some distance; this is unusual, however. The two eggs which this bird always lays, are generally deposited during the last few days of May or early June."—Nelson.

Sandhill Crane: *Grus mexicana*.

Length: 40 to 48 inches.

Description: Adult light lead-gray, never pure white, the wing-tips darker and the shafts of the primaries white. Head naked behind the bill, which is 5 inches or more in length. Young, rusty-brown with head all feathered. The light gray of the adult is acquired gradually.

Breeding habits: Nest on some elevation such as an old muskrat house, rising out of the water in a marsh. Eggs 2, gray with brown spots.

Season and range: A migrant and no doubt still a summer resident in places.



WHOOPING
CRANE

SANDHILL
CRANE

LITTLE BROWN CRANE

The sandhill crane, so called at least, is a familiar bird during migration, flying in small flocks and attracting attention by its hoarse croaking call. It is very wary, usually flies high and alights only in lonely places. There is no doubt that the two species of cranes are popularly classed together under this name, but those nesting about marshes across the prairie are the sandhill, as it is more southern in its distribution than the brown crane.

All the cranes were highly prized as game birds when taken young enough, but they are so wary that it is hard to see how they are in any danger of extermination at the hands of the hunter. Only once have I succeeded in bringing down a couple of these birds, and the result from

a gastronomic standpoint was highly satisfactory. All the cranes are now protected by law, shooting at any season being illegal.

The cranes as a whole outwardly resemble the herons, and in popular usage some of the herons are often called cranes. In reality their structure more closely resembles the rails from whom they are outwardly so different. One very peculiar anatomical structure of the cranes is the coiling of a part of the trachea or "windpipe" inside the breast bone. The whooping crane has a trachea fully the length of its body, and about two feet of it is disposed of in this coil.

FAMILY RALLIDÆ: RAILS AND COOTS

Mostly marsh birds with conical bills, legs much more fully developed than the wings, and the feet never webbed but sometimes lobed.

SUBFAMILY RALLINÆ: RAILS

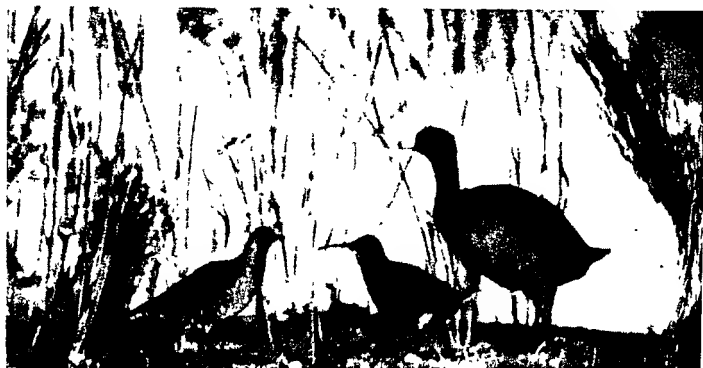
Rather small marsh birds with comparatively large, strong feet and legs, enabling them to walk with ease over the softest bog.

The rails are dull-coloured and frequent the densest marshes, remaining hidden amongst the reeds. They are entirely harmless but of no particular value, except, perhaps, that they do their share in preserving a balance by consuming insects.

Virginia Rail: *Rallus virginianus*.

Length: 8.5 to 10.5 inches.

Description: Upper parts streaked with dark brown or black and a sort of yellowish-olive, changing to reddish on the wing-coverts and dark brown on the neck and top of the head. Lower parts red, varying much in shade and fading both toward the throat and rear. Flanks and wing-linings



CAROLINA RAIL

VIRGINIA RAIL

COOT

blackish barred with white, the feathers long, and those of the two sides often meeting across the belly. Bill black above and brown beneath. Feet greenish.

Breeding habits: Nest a rude structure of reeds just out of the water. Eggs 6 to 15, white or cream marked with brown.

Season and range: A summer resident around marshes in Manitoba, Saskatchewan and northward.

While the Virginia rail is rather common in Manitoba and for some distance west, it is never plentiful. It is most common in the Red River valley, but has been reported as far west as Touchwood Hills. It can be easily distinguished from the Carolina, which is much more plentiful, by its red breast.

Sora Rail: *Porzana carolina*.

Carolina Rail.

Length: 8 to 9 inches.

Description: Upper parts brown and black streaked with white. Flanks and sides barred with black and white. Face and a line down the front of the neck, black. A line over the eye, the sides of the neck and the breast, gray. Bill greenish-yellow. Feet black.

Breeding habits: Nest of grass on the ground in marshes. Eggs 8 to 15, gray with brown spots.

Season and range: A summer resident breeding around marshes across the whole prairie region.

This is the common rail of the prairie, breeding around all the marshes. With us it has never been considered a game bird and few sportsmen know it even by name. It is only necessary to sit still for awhile in the tall reeds, when one of these birds will come "tip-toeing" through the grass to take a peep at the intruder, or its harsh call will be heard but a few feet away. It is a weak flyer and apparently flies low during migrations, at least in the spring. Scarcely a spring passes that someone does not bring in one of these birds found dead in the street, killed by flying against telephone or other wires at night. I have seen five or six picked up on the same morning and once found one dead in my own back yard. It had been killed by flying against a wire clothesline, not more than seven feet from the ground.

Yellow Rail: *Coturnicops noveboracensis*.

Length: 6 to 7 inches.

Description: Upper parts streaked with blackish or brownish-yellow and variously flecked with white. Lower parts pale brownish-yellow deepest on the breast. Flanks dark, barred with white. Linings of the wings white.

Breeding habits: "Nest on the ground in grassy places. Eggs 6 or more, creamy-buff, densely sprinkled and speckled on larger end with rusty brown."—Ridgway. The nest has never been found in the prairie region.

Season and range: Apparently a summer visitor in Manitoba and eastern Saskatchewan, but very difficult to locate.

Often in marshy places a small rail, with long legs trailing awkwardly behind it, and showing some white on the

wings or sides, will rise suddenly out of the grass, fly a few yards and apparently fall back into the grass again. I have seen the bird many times but never collected one. On one occasion I flushed several from the edge of a ditch in a small marshy place along a well travelled road, but I never succeeded in flushing one the second time. This is all I know about the bird, but many people have seen it, and Seton says it is the yellow rail.

SUBFAMILY FULICINÆ: COOTS

Aquatic duck-like birds with lobed feet, narrow pointed bills, and a horn-like plate on the forehead.

Coot: *Fulica americana.*

Mud Hen.

Length: 14 to 16 inches.

Description: General colour slaty-black, lighter below and darker on the head, a little white on the wings and on the under side of the tail. Bill white with a black mark near the end and extended as a hard horny plate on the forehead. Feet dark yellowish-green with black claws.

Breeding habits: Nest a mass of dead reeds in the edge of the water or sometimes floating. Eggs 10 to 12, gray.

Season and range: A summer resident around marshes across the whole region.

Every one who knows the marshes knows the mud hen. It would be hard to say whether it looks like a duck with a hen's bill or a hen that swims. When swimming it constantly moves its head with the motion of its feet, giving it the appearance of walking in the water. No pond is complete without this bird, and its peculiar, harsh, cackling note comes from wherever grass and water meet.

While a really good flyer it rises with difficulty from the water, at first flopping along with both wings and feet striking the water, until it gains sufficient headway to rise.

In the fall great flocks of these birds collect on the lakes, often covering acres in extent. When startled the whole flock will make off with tremendous flapping and splashing, but only a few birds really launch themselves into the air; the others drop back on the water as though unable to rise.

Although in some places the mud hen is regarded as a game bird, it is not valued as such by us, and is allowed to go its way unmolested except by its wild enemies and the gun of an occasional novice.

ORDER LIMICOLÆ: SHORE BIRDS

Small wading birds, the young able to leave the nest as soon as hatched.

These are plainly coloured birds as a whole, frequenting the shores of ponds and lakes where they may be seen wading in the shallow water and often probing in the mud for food. Some species frequent drier ground and a few hide themselves in grassy places, but the type is unmistakable.

This order includes some of the most highly prized game birds, such as the woodcock and the snipe, but with us they are not often shot.

Small, with distinctly lobed toes.

Family Phalaropodidæ: Phalaropes. Page 83.

Rather large, bill strongly curved upward.

Family Recurvirostidæ: Avocets. Page 85.

Bill long and adapted to probing in the mud.

Family Scolopacidæ: Sandpipers, etc. Page 85.

Bill short with the nostrils in the soft skin.

Family Charadriidæ: Plovers. Page 98.

Bill short and somewhat bayonet-pointed, the nostril not in the soft skin at the base.

Family Aphrizidæ: Turnstones. Page 101.

FAMILY PHALAROPODIDÆ: PHALAROPES

Small waders with partially webbed feet.

Wilson's Phalarope: *Steganopus tricolor*.

Length: 8.25 to 9.5 inches.

Description: Female: Crown gray, changing to white on the

back of the neck. A white line over the eye. Sides of the neck chestnut, changing to black behind the eye and continued backward to the base of the wings, but paler. Upper parts gray, very pale towards the tail and changing to brown on the wings. Under parts white, but washed with chestnut on the breast. Bill and feet black, the webs along the toes very slightly, if at all, scalloped.

Male: In summer resembling the female but much duller in colour, and smaller. After moulting, both sexes are gray above and white below.

Breeding habits: A small depression in the moist ground and lined with grass. Eggs 3 or 4, creamy or gray marked with brown.

Season and range: A common summer resident, nesting in moist grassy places across the prairie.

The female of the phalarope is an exception amongst birds. She is not only larger than the male, but she wears the brighter plumage and assumes the lighter share of domestic duties. In fact, she is a veritable new woman. It is not a rare thing in bird life for the female to be larger than the male. In many of the birds of prey, she is not only larger but much fiercer; but in cases where the sexes are differently coloured, it is the exception for the male to wear the duller plumage.

These phalaropes are not aggressive in any way and may pass unnoticed. A pair may be found nesting around almost any little pond with grassy margins, and the most noticeable thing about them is that they swim much more than most shore birds. Indeed the gaily coloured female may be found on the pond much of the time, swimming in a sort of circle, while her complacent spouse is incubating the eggs.

The Northern Phalarope resembles this bird but is not common.

FAMILY RECURVIROSTRIDÆ: AVOCETS

Birds with long slender bills curving upward, and almost fully webbed feet.

Avocet: *Recurvirostra americana*.

Length: 16 to 20 inches.

Description: Mostly white, shading into reddish-brown on the head and neck. Wings black with white coverts, linings and secondaries. Tail gray. Bill black, about 3.5 inches long, slender and curved upward. Legs long, bluish-black, the feet with flesh-coloured webs.

Breeding habits: Nest a slight depression in the marshy ground. Eggs 3 or 4, gray or buff spotted with brown.

Season and range: A summer resident rare in Manitoba, but more plentiful farther west from the international boundary north to latitude 54 degrees.

This striking and beautiful bird is one of the largest of the shore birds, and, as is indicated by its webbed feet, is as good a swimmer as it is a wader. It is found nesting around alkaline ponds across the prairie, particularly towards the west.

FAMILY SCOLOPACIDÆ: SNIPES AND SAND-PIPERS

Birds with long straight bills and feet not webbed. Many of them obtain their food by probing in the mud.

Wilson's Snipe: *Gallinago delicata*.

Length: 10.5 to 11.5 inches.

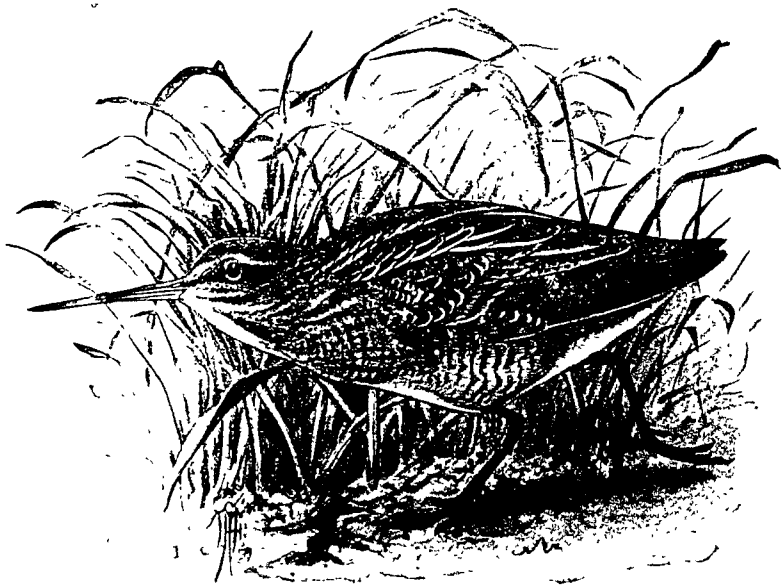
Description: Upper parts brownish-black varied with tawny and white. Linings of the wings and the belly white. Breast mottled brown and white. Sides barred in black and white. Throat white with small brown specks. Crown black with a light stripe. Bill greenish, but darker toward the tip and much longer than the head. Feet gray.

Breeding habits: Nest a depression in the grass or moss in some wet place. Eggs 3 or 4, gray with a brownish shade.



Season and range: A common summer resident breeding in wet places across the prairies.

Snipe is a term applied popularly to many birds, but this is the true snipe of America. Its dull colouring and long straight bill are sufficient marks of identification, as it is one of the best known game birds of the continent and scarcely needs description. It will sit close in the grass



WILSON'S SNIPE

and then suddenly spring into the air with a rasping note, and its zig-zag flight will tax the skill of the most experienced gunner.

Just before dark these birds will be seen in the air in considerable numbers, either flying singly or in small groups. After darting and curving around, often at considerable height, they will plunge suddenly to earth and light some-

times within a few feet of one. Once settled it is hard to distinguish them from the mud and grass. The specific name *delicata* refers to the high regard in which they are held when properly served on toast. This is the only shore bird which remains on the game list.

Dowitcher: *Macrorhamphus griseus*.

Length: 10 to 12 inches.

Description: Adult male and female in breeding plumage: Upper parts black profusely barred or streaked with white or reddish, the markings quite fine on the neck and head. Primaries black, the quill of the outer white, the others black; secondaries edged with white. Wing-linings white. Tail barred black and white or reddish, the coverts white, barred or spotted with black, and passing into pure white on the back. Under parts rich rusty red growing pale towards the tail and spotted with black, the spots larger on the sides but becoming small or almost disappearing on the throat, sides of the neck and down the centre of the breast and belly. Bill greenish-black, 2 to 3.25 inches long, the tip broadened and pitted and the upper mandible slightly projecting. Legs and feet greenish-black, the two outer toes partially webbed.

In fall, dark gray above, the feathers edged with white, and white beneath, shaded with gray on breast and sides. Best identified in this plumage by the bill.

Breeding habits: Nest a shallow depression in the moss without lining. Eggs 4, buff spotted with brown.

Season and range: A migrant going north in the spring and returning in August.

The dowitcher is rather rare in Manitoba, but becomes quite plentiful farther west. It lingers for a time around lake shores in the spring and then disappears into the north, where it breeds right to the shores of the Arctic Ocean. It is unlike the snipe, in that it generally flies in quite large and compact flocks rather than singly or in

small groups, and it prefers the shores of lakes to the moist meadowland so dear to the snipe.

The female is larger than the male, and on their return from the north in August, adults and young are much alike, being gray above and white below, and are best recognized by their bills.

There are two forms of this bird, the long-billed, which is supposed to be the western form, being a somewhat larger bird than the eastern, with a distinctly longer bill. The fact seems to be that a regular gradation from one form to the other occurs, and that while those with longer bills may be more numerous with us, the difference is not very apparent. The specimens, all western, in our collection are on the border between the two forms. At one time the long-billed was regarded as a full species by the A.O.U. checklist, but it has since been reduced to the position of a subspecies.

Least Sandpiper: *Pisobia minutilla*.

Length: 5.5 inches.

Description: Upper parts blackish or gray, the feathers edged with dull red and tipped with white or gray. Under parts white. Lower throat and sides spotted. Bill black. Legs greenish-black. In fall the upper parts are brownish-gray and the lower parts white.

Breeding habits: Nest a depression in the ground, lined with grass and placed near water. Eggs 3 or 4, gray to pale brownish spotted with reddish-brown.

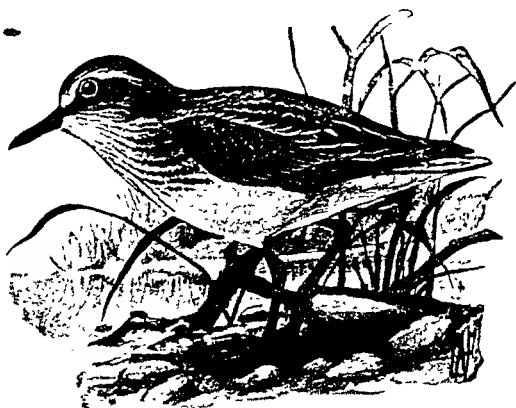
Season and range: A summer resident or migrant. A few nest around sloughs across the prairie, but the majority go north.

*"Across the narrow beach we flit,
One little sandpiper and I;
And fast I gather, bit by bit,
The scattered driftwood bleached and dry.
The wild waves reach their hands for it,*

*The wild wind raves, the tide runs high,
As up and down the beach we flit,—
One little sandpiper and I."*

CELIA THAXTER.

This little bird, commonly known in some places as the "peep", is quite plentiful during migrations, and a few are known to nest in suitable places. It is especially plentiful in August when it arrives on its way south. The birds then gather in large flocks along the shores of lakes and ponds,



LEAST SANDPIPER

running along the sand and uttering their "peep, peep", from which they get their popular name.

It is the smallest of a small race, and why so tiny a creature should be pursued and shot, either for sport or game, is hard to understand. Yet it was considered a game bird and shot as such, although the practice was never common in Canada. This cheerful, sociable, little fellow is never molested by us.

Sanderling: *Calidris leucophæa*.

Length: 7.5 to 8 inches.

Description: Upper parts and whole neck variegated in gray black and reddish. Upper tail-coverts white marked with brown. Primaries dark. Under parts white, except the upper breast which is tinged with brown and spotted with blackish. Young more black, and no reddish on the upper parts, pure white beneath. Winter plumage, gray above and white beneath. Bill and feet black, the feet with no hind toe.

Breeding habits: Nest of grass in a small depression in the ground. Eggs 3 or 4, light brown with darker spots.

Season and range: A rather common migrant in Manitoba but more rare farther west. It may breed about the north ends of the largest lakes.

The sanderling is a beach bird and is found mostly about the larger lakes, being quite plentiful in migration about Lake Manitoba. It may easily be confused with other sandpipers at a distance, but in the hand may be readily recognized at any time of year by the absence of the hind toe.

Marbled Godwit: *Limosa fedoa*.

Length: 16 to 22 inches.

Description: Upper parts blackish, the feathers barred with reddish-brown. Lower parts fairly uniform reddish-brown barred with dark. Neck speckled. Bill about 4 to 4.5 inches long, flesh-coloured toward the base and dark toward the tips. Throat white. Legs dark gray or blackish.

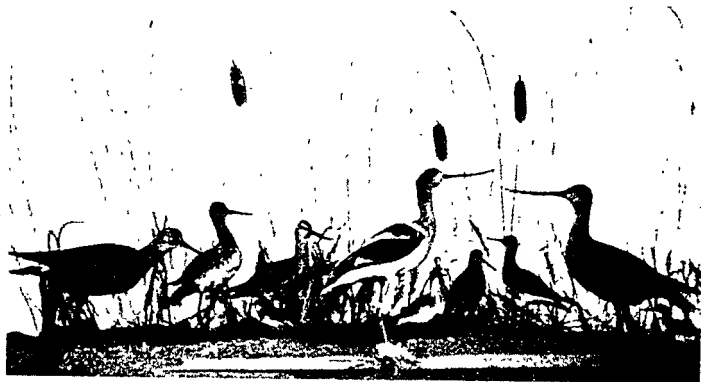
Breeding habits: Nest a hollow in the ground lined with grass. Eggs 3 or 4, gray marked variously with brown.

Season and range: A summer resident around marshes across the prairie.

The godwit is the largest of all the brownish-coloured shore birds except the long-billed curlew. The sexes are similar in colour, but the female averages larger than the

male. Its large size and its very long straight bill serve to make it easy to recognize. While never really numerous, this bird is common about prairie marshes, but is more wary than most shore birds and its nest is seldom found.

A GROUP OF SHORE BIRDS



HUDSONIAN GODWIT WILLET AVOCET MARBLED GODWIT
DOWITCHER
GREATER YELLOW-LEGS LESSER YELLOW-LEGS

The Hudsonian godwit, a smaller bird and more reddish on the breast, but otherwise resembling the marbled, is now rare. In fact for a time it was feared that it was becoming extinct. It is being now more frequently seen, and can be recognized by its resemblance to the marbled godwit and its smaller size.

Greater Yellow-legs: *Totanus melanoleucus*.

Length: 12 to 15 inches.

Description: Upper parts gray or blackish, speckled or streaked with whitish. Upper tail-coverts mostly white. Under parts white, the breast and sides marked with dark arrow-

heads. Bill greenish-black, straight, or with a slight upward crook about the centre. Legs very long, chrome-yellow. Not much change in plumage for age, sex or season.

Breeding habits: Nest a slight depression in the ground near the water. Eggs 3 or 4, buff with brown spots.

Season and range: An abundant migrant, particularly in the eastern part of the prairie, and nesting around marshes in the wooded district just north of the prairie. Some few may nest about the prairie sloughs.

The yellow-legs, whether this or the next species, is perhaps the most familiar of all our shore birds. This is not so much due to numbers as to noise. These long-legged screeching birds may be found around any slough, and at almost any time during the summer. If they do not breed here, they at least stay late and return early. August sees them plentiful on the return trip, and some will remain until quite late in the fall.

Unlike other waders these birds will alight on trees, and cut a rather ungainly figure, on their long stilt-like legs, silhouetted against the sky. Around the wooded marshes, which form the breeding grounds of the species, this practice is quite common, but we seldom see it about the prairie sloughs.

Yellow-legs: *Totanus flavipes*.

Length: 10 to 11 inches.

Description: An exact miniature of the preceding with relatively somewhat longer legs.

Breeding habits: The same as the preceding.

Season and range: A migrant, suspected of breeding across the prairie, but no nest reported.

This is the common yellow-legs, more plentiful than the greater and just as noisy. The two species flock together and are very similar in every way, and yet gunners always

recognized the difference. They were both considered game birds and constituted a large proportion of the "snipe" taken. They are now protected by law and so will not likely become as scarce as the godwits.

A peculiar thing about these birds is that, while so common and assertive, their nests have seldom been found. Both species are so wary, and spread the alarm so well when anyone approaches, that they have succeeded in screening their nests from all but a lucky few.

Solitary Sandpiper: *Helcdromas solitarius*.

Length: 8 to 9 inches.

Description: Upper parts brown or gray, streaked or speckled with white. Upper tail-coverts and rump not conspicuously white. Tail barred with black and white, the white predominating on the outer feathers and the black on the inner. Below white, the breast, sides and neck more or less tinged with brown and spotted with dusky. Bill blackish. Legs dull greenish-black, drying black. There is very little variation of colour due to age, sex or season, but the general tone is more brown in spring and gray in fall.

Breeding habits: Not well known, but like the yellow-legs it alights on trees in the vicinity of its nest.

Season and range: No doubt a summer resident in the prairie region, but very shy and solitary and not many records of nests or eggs exist.

This bird of retiring habits frequents the wooded borders of streams or woodland lakes rather than the open marsh. It has a peculiar habit of ducking its head while standing on the edge of the water which has given it the popular name of "tip-up". This, however, is not the only one of the sandpipers that tips, and that name more properly belongs to the spotted sandpiper. The tipping of the two species, however, differs. The solitary bobs its head, while the spotted jerks its tail.

Solitary is the correct name for this bird. It seldom flocks and is most often seen alone. Even if two are apparently in company, they are seldom close together. Its note is clear but mellow, lacking the harshness of the scream of the yellow-legs, and when it alights, its long tapering wings are stretched above its back until the tips meet, and are then carefully folded.

Willet: *Catoptrophorus semipalmatus*.

Length: About 16 inches.

Description: Upper parts gray more or less spotted or mottled with brown, the gray becoming almost uniform on the neck and extending around the neck. Head finely marked in gray and brown. Throat whitish. Larger wing-coverts blackish. Primaries blackish, shading to white towards the base, with white quills. Tail black, the outer feathers marked with white. Tail-coverts mostly white, forming a distinct white bar between the black of the tail and the dark back. Under parts white tinged with gray on the breast and sides and often suffused with pinkish, and shading to white on the under tail-coverts. Feet black with two distinct webs, the outer the larger. Bill about 2 to 3.25 inches long, almost straight, the under mandible light towards the base.

Breeding habits: Nest in a hollow in the ground. Eggs 4, brown with darker spots.

Season and range: A summer resident around marshes and lakes across the prairie and north to latitude 56°.

The western willet, *catoptrophorus semipalmatus inoratus*, is a colour variation of the more eastern bird, and its markings are somewhat uncertain and more or less variable. Its size, length of bill and semi-palmated feet will distinguish it from any other of our shore birds. The bill of the western form is very much longer than that of the eastern. About the marshes it has a peculiar whistle, often interpreted "pill-willet" which is very characteristic. It is not

plentiful in Manitoba though more abundant farther west, but is found across the whole prairie. It frequents the margins of alkaline sloughs, and marshes where the water is somewhat saline.

Bartramian Sandpiper: *Bartramia longicauda*.

Upland Plover.

Length: 11.5 to 12.5 inches.

Description: Upper parts blackish, the feathers edged with whitish or yellowish, the darker colour predominating on the head and back, the lighter colours prevailing on the neck and wings. Tail-coverts dark brown. Under parts dull white shading to tawny, the forebreast with dark streaks. Bill yellow, the ridge and tip black. Feet yellowish. Very little change in colouring for age, sex or season.

Breeding habits: Nest on the ground in dry, somewhat rough, land. Eggs 4 or 5, white or creamy spotted with brown.

Season and range: A common summer resident across the prairie.

Unlike the other sandpipers this is a bird of the uplands. It prefers to nest in dry fields or prairie, where grass or broken ground offers plenty of cover. The more bare and open prairies of southern Alberta and south-western Saskatchewan do not attract it, and the bird is less plentiful in those places. Its numerical centre seems to be western Manitoba and eastern Saskatchewan, and I have seen hundreds of these birds on a single quarter section of prairie in late August or early September.

In other ways it resembles most of the sandpipers. It is essentially a bird of the ground, although a few alight on trees in the vicinity of their nests. The bartramian will alight on a fence post, stretch its wings above its back and then fold them up, as the solitary does by the water's edge. To the gunner these birds are known as upland plover, and were among those most frequently

shot as game until the law intervened to prevent their destruction.

Spotted Sandpiper: *Actitis macularia*.

Tip-up.

Length: 7 to 8 inches.

Description: Upper parts brownish-gray with a satiny lustre, the head and neck finely streaked with black and the other parts marked with irregular bars. A white line over the eye. Under parts white marked with numerous round black spots. Some white on the wing and the upper tail-coverts whitening towards the sides. Bill flesh-coloured tipped with black. Feet pink or white when fresh and



SPOTTED SANDPIPER

yellow when dry. In fall and winter gray above and white beneath.

Breeding habits: Nest of grass on the ground, generally near the water. Eggs 4, pointed, creamy or gray marked with darker colours.

Season and range: A summer resident across the prairies and northward.

The most peculiar thing about this bird is the "teetering" of its tail whenever it stops in its running along the shore. Coues' description of the peculiar action of this bird is worth quoting:

"As often as the Teeter-tail stops running, the fore parts are lowered a little, the head is drawn in, the legs are slightly bent, while the tail bobs up with a jerk and is drawn down again with the regularity of clock work—as if the tail were spring-hinged, always liable to fly up, and requiring constant presence of mind to keep it down decently. It is amusing to see the male perform during the mating season, swelling with amorousness and self-sufficiency, puffing up his plumage till he looks twice as big as usual, facing about this way and that, saluting all points of the compass with his hinder parts—for such is the original way the Tip-up has of conducting his courtships."

As we see the bird along our lake shores, mostly in the late summer after it has shed the characteristic spots from its breast, the tail action is the best means of identification.

Long-billed Curlew: *Numenius americanus*.

Length: 20 to 24 inches.


Description: In plumage strongly resembling the godwit,—dark brown varied with reddish above and more uniform cinnamon brown below. Bill mostly black, 4 to 8 inches long, strongly curved downward, the upper mandible overhanging the lower. Legs bluish-gray. Very little difference in colouring for age, sex or season, but the young sometimes with shorter bills.

Breeding habits: Nest a hollow in the ground on the open prairie, lined with a little grass. Eggs 3 or 4, gray or buff.

Season and range: A summer resident across the prairies but not extending its range far northward.

Some years ago the long-billed curlew was plentiful in Manitoba and was a favourite game bird. It is now rare and I have not seen one for several years. Farther west it is said to be more plentiful, breeding in some places, but Mitchell reports it is not common and apparently decreasing. It is more a bird of dry places than many shore birds, nesting on the open prairie and preferring moist, grassy places to the lake shores. It will be a great pity if this bird, once so plentiful, should become extinct.

FAMILY CHARADRIIDÆ: PLOVERS



Bills short for shore birds, the nostril opening in the soft skin at the base of the bill.

The plovers differ from the sandpipers mainly in the character of the bill and the number of toes. The bill is short and arched on the top, resembling the pigeon's in being soft at the base, the nostrils opening in soft skin rather than the horny beak. As a rule they have only three toes but there are exceptions to this.

On the whole they are more compact birds than the sandpipers, with shorter necks, and although true shore birds, are more given to frequenting dry places than most of the others.

Black-bellied Plover: *Squatarola squatarola*.

Length: 11 to 12 inches.

Description: Upper parts mixed dull black and white, the top of the head and tail-coverts mostly white. Sides of the head and entire under parts black. Bill and feet black, each foot

with a small but distinct fourth toe. In fall and winter upper parts speckled gray. Under parts white or whitish on the breast, speckled with grayish-brown. Primaries black narrowly edged with white.

Breeding habits: Nest of dry grass in a depression in the ground. Eggs 4, dark drab or brown irregularly marked with darker brown.

Season and range: A spring and fall migrant across the prairie, but very irregular and breeding far north.

This is a large and beautiful plover, often seen in small flocks in the spring and staying at times until June. About May 24, 1918, I saw a flock in beautiful plumage on the shores of Lake Manitoba, which stayed during the four days I was in the locality. It is somewhat erratic in its visits, and where it was quite plentiful one year it may not be seen again for several years. Several times I have seen flocks on the shores of lake Manitoba, but it does not always come, at least in any numbers. Although both this species and the next are said to be more plentiful on the eastern coast during the fall migration, there is no doubt that they visit us in the fall as well as in the spring, and some say in greater numbers. I have before me, while writing, a specimen in typical winter plumage taken at Pelican Lake, Man., Oct. 15, 1921.

Golden Plover: *Charadrius dominicus*.

Length: 10 to 11 inches.

Description: Upper parts blackish, speckled with golden yellow and often with white, the crown and back more strongly marked than the neck. Forehead and a stripe over the eye white. Sides of the head and entire under parts brownish-black. Bill and feet black. The young and adults in fall and winter are less bright above and grayish-white beneath.

Breeding habits: Very similar to the preceding.

Season and range: A spring and fall migrant in the prairie

provinces, leaving for the north about the end of May and returning in August.

The golden plover so much resembles the black-bellied that the two are hard to distinguish, if the specimens are not in the hand. Its breeding place is the barren grounds of the north and the shores of the Arctic Ocean and Hudson Bay. It is more a bird of the uplands than the black-bellied. In the spring migration, small flocks of these beautiful birds may often be seen alighting on the ploughed fields. In certain lights when a flock is in flight, a flash of the golden colour of the back may be seen. In the return migration, the birds are not so easily recognized but they still fly in small compact flocks. I have seen three birds killed with one shot in the fall from a flock flying over a stubble field several miles from any water. They are not plentiful either spring or fall and seem to be becoming more scarce, and are also reported as scarce to the westward.

Killdeer: *Oxyechus vociferus*.

Length: 9 to 10 inches.

Description: Upper parts grayish-brown, the rump and upper tail-coverts orange-brown or chestnut. A white stripe over the eye and across the forehead. A black line above the latter and a dark patch below the eye. A black ring around the neck and a black band across the breast, the two separated by a white band. Under parts including the throat, white. Bill black. Feet flesh-coloured.

Breeding habits: Nest a depression in the bare ground. Eggs 4, dirty white irregularly marked with brown and much resembling the ground on which they rest.

Season and range: A common summer resident.

The killdeer is so well known that description seems unnecessary. Its voice betrays it and it is well named "vociferus". Whether on the ground or on wing the loud



KILLDEER ON THE NEST

“kil-dee, kil-dee” is heard, and if any one approaches, it springs into the air with such a succession of cries that one thinks the bird must surely suffer from nerves. It will deposit its eggs on any piece of bare ground or ploughed land, no matter how far from water, and when the nest is approached the old bird will flutter off as if both legs and wings were disabled. The killdeer is much more a bird of the uplands than of the shores or marshes.

FAMILY APHRIZIDÆ: TURNSTONES

Plover-like birds with the nostril in the bill, not in the skin above. Bills strong, hard and sharp-pointed.

The turnstones resemble the plovers in shape and length of bill, but have four toes like the sandpipers. The bill is not arched on top or soft at the base and is peculiarly sharp-pointed. They are really surf-birds, getting their living by searching among the stones of the sea shore for

insects and crustaceans concealed there. We have one species that frequents the shores of the larger lakes.

Ruddy Turnstone: *Arenaria interpres*.

Length: 8 to 9 inches.

Description: Adult male: Upper parts reddish flecked with black and some of the feathers edged with white. Primaries blackish, the inner edges shading to white, and white shafts. Secondaries and wing-coverts marked with black, white and reddish. Tail white with a broad band of black mixed with reddish near the end, only a very narrow band of white at the end, the central feathers often with no white tips. Lower back and upper tail-coverts pure white with a bar of black. Under parts pure white including the tail and linings of the wings. Breast black running up the sides of the neck. Crown striped black and white. Throat and back of neck white, the white of the neck running around on the sides. Bill black. Feet orange with black nails. Adult female similar but the colours duller and more mixed. Young and adults in winter lack the reddish and the black is dull or brownish.

Breeding habits: Nest on the ground. Eggs 3 or 4, gray marked with brown.

Season and range: A migrant in Manitoba and eastern Saskatchewan.

The turnstones are most likely to be found around the shores of the large lakes. They may be seen in large flocks on the sandy beach of Lake Manitoba during the spring migration, and occur wherever conditions favour them through the greater part of Saskatchewan, but seem to become more rare going west. In the fall they seem to mix more with the other shore birds or are not so numerous. At least they are not so noticeable.

ORDER GALLINÆ: GALLINACEOUS BIRDS

Poultry-like birds which scratch the ground to secure food.

These birds bear about the same relation to the turkeys and chickens of the farmyard as the wild water fowl do to the domestic ducks and geese. They are perhaps the most highly prized of all game birds.

Introduced from Europe.

Family Phasianidæ: Partridges and Pheasants. Page 103.

Native.

Family Tetraonidæ: Grouse, Spruce Partridges and Ptarmigans. Page 105.

FAMILY PHASIANIDÆ: PARTRIDGES AND PHEASANTS

Partridge: *Perdix perdix*.

Gray Partridge.

Length: about 13 inches.

Description: General body colour gray, the colour of the back being overcast with brown caused by the brown tips of the feathers, the brown becoming more decided towards the tail. Wings and tail brownish-gray strongly barred with rich chestnut-brown, the feathers of the wing-coverts with white streaks near the centre. Sides barred with chestnut. The lower breast with an irregular or crescent-shaped blotch of rich chestnut. Head cinnamon-brown, the crown streaked with black, a triangular patch of red behind the eye. Bill and feet dark.

The female is less richly coloured than the male, generally with a much smaller crescent of chestnut on the breast and a very small patch of red behind the eye.

Breeding habits: Nest on the ground, similar to our grouse, and said to lay as many as twenty eggs at times.

Season and range: Resident, introduced from Europe and rapidly spreading all over the prairie region.

This is the gray partridge of Europe which has been introduced into America under the name Hungarian Partridge. This name seems to have been given to the bird in England, where owners of large properties were in the



Male

Female

GRAY PARTRIDGE

habit of importing birds from the continent to replenish the depleted flocks on their estates. The importations were usually from Hungary and the name was given to distinguish imported birds from English birds of the same species. The name has been wrongly applied in America to designate the species. This is the one bird on this continent that should be called a partridge. It is called gray partridge in England to distinguish it from another species,

the red-legged partridge, which has been imported into that country from France.

The partridge was imported into Alberta about 1908, when a few pairs were liberated about twelve miles south of Calgary. This was done by sportsmen of that city and in succeeding years other liberations were made, in all about 150 birds. They increased at an amazing rate and although some were afterwards liberated north of Edmonton it was not until after birds from the south had already reached there. They have spread eastward all across Alberta and are now found half way across Saskatchewan. An open season has existed in Alberta since about 1912 but the numbers do not seem to be decreased.

Recently several liberations have been made in Manitoba. In the spring of 1924 fifty pairs of the birds, imported from Czecho-Slovakia, were liberated about twenty-five miles northwest of Winnipeg by the Game Protective League of Winnipeg, and the following winter twenty pairs were released about six miles east of Neepawa.

The introduction of a new species is often a doubtful benefit, but with game birds the danger is not great. If for any reason they prove undesirable they can soon be reduced by the removal of the protecting laws.

FAMILY TETRAONIDÆ: GROUSE, SPRUCE PARTRIDGES AND PTARMIGANS

Richardson's Grouse: *Dendragapus obscurus*.

Fool Hen.

Length: 20 to 22 inches.

Description: Back and wings brown, finely marked with irregular lines of gray or yellowish-brown, with some white on the feathers about the wings. Tail black with gray markings and may have a slaty-coloured end. Long feathers

along the side tipped with white. Under parts bluish-gray, marked in places with white. The feathers on the side of the neck elongated and covering a piece of naked yellow skin, but not forming distinct tufts. A yellow comb over each eye. This is the colouring of the mature cock bird, but the hen is more plain, lacking the highly coloured comb and neck drum of the male.

Breeding habits: Nest on the ground and made of any convenient material. Eggs 7 to 10 or more, creamy speckled with brown.

Season and range: A resident at high elevation throughout the Canadian Rockies and the foothills.

In the conifer forest which stretches across northern Canada and clothes the mountains and hills of the Rocky Mountain system, there is found a race of grouse not generally well known. These are dark-coloured birds with a peculiar comb over each eye. They are divided into two distinct types, represented by the Canada grouse of the northern and eastern part of the continent and the dusky grouse of the mountains of the southwestern States. The Canada grouse is the smaller, has red combs over the eye and no drums of bare skin on the neck; while the dusky grouse of the southwest has yellow combs, and the male has a well developed neck-drum, *tympanum*, on each side.

Where the ranges of these two types meet in the Canadian Rockies there are found species of both types, and the Richardson's grouse is the northern representative of the dusky grouse of the south. It is a large, rather slow bird, and often so tame that it may be killed with a stick, being called for that reason the "fool hen".

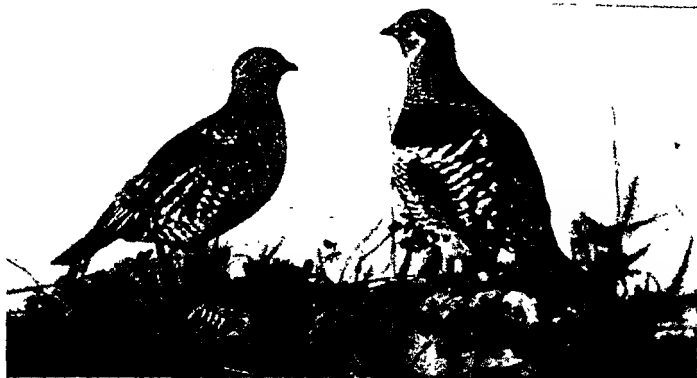
It is found on the mountains of western Alberta and extends its range west to the Coast range and north to about latitude 64. In the mating season the males produce a peculiar booming or rumbling sound, which is characteristic of all grouse, having drums of naked skin on the sides of the

neck. These drums may be inflated and are, no doubt, used in producing this sound.

Spruce Partridge: *Canachites canadensis*.

Length: 15 to 17 inches.

Description: Male: Upper parts black and gray in wavy bars, with some white marks on the wing-coverts. Tail black, the quills tipped with brown but the centre feathers very



Female.

Male.

SPRUCE PARTRIDGE

slightly marked. Upper breast black extending around on the shoulders; the rest of the lower parts and sides much like the back, except strongly marked with white and a black area in the centre of the belly. Lower tail-coverts black and white. Lower neck gray all around running up to join the gray of the crown. Front of the lower neck speckled black and white. Throat black running around on the sides of the head. Comb above the eye red or more rarely yellow. Bill black. Feet feathered to the toes.

Female similar but more dull and uniform, lacking the pronounced black and white. No comb and only a slight tip of brown on the tail feathers.

Nesting habits: A nest on the ground with about a dozen buff eggs spotted with brown. The males drum like the ruffed grouse.

Season and range: A resident of the spruce forest from the Rocky Mountains west of Edmonton east to Labrador, north to the limit of trees, and south to the limit of the spruce woods.

The spruce partridges are a race of dark-coloured birds found in the conifer forests across the continent to the Rocky Mountains and north-westward to Alaska. They are a hardy race, extending their range northward to the limit of trees and living entirely on buds, leaves and various kinds of berries. In habits they resemble the ruffed grouse more than the other dark races of the mountains and plains, but have never been highly valued as game birds, as their food does not tend to give a good flavour to the flesh.

They are birds of the thick spruce woods, and their sombre colour, along with the deep shadows in which they are found, seems to surround them with a sort of gloom almost approaching the mysterious. Moreover, they are very tame, apparently not knowing man enough to fear him. Only the remoteness of their haunts and their lack of any real value prevents their extinction.

There are several sub-species, but they differ from each other very slightly and mostly in colour only. The Hudsonian spruce partridge is the type of the species and its range is the northern part of the forest belt. It is somewhat darker than the more southern Canada grouse. To all but the close student of bird life they are all the same, but each variation has its own range fairly definitely de-

finer. This is the most northern and is not the one best known, as its range is beyond the usual haunts of man.

The Canadian Spruce Partridge, or Canada Grouse, is the type which is found in the southern part of the spruce woods and so the one with which we come in contact. It has more white markings than the northern bird and is found in the spruce woods from the Rocky Mountains to the Atlantic.

Franklin's Grouse: *Canachites franklini*.

Length: About the same as the preceding.

Description: Resembling the preceding, but the tail slightly longer, not so much rounded on the end and lacking the distinct yellowish-brown on the tip. The tail-coverts conspicuously marked with white.

Breeding habits: Very much as in the preceding.

Season and range: A resident in the Rocky Mountains from south of the international boundary to Alaska. It is found in the valleys of the Rocky Mountains throughout western Alberta.

Franklin's grouse differs from the spruce partridge about as Richardson's differs from the dusky grouse of the south-west; it is a distinct colour variation with a longer, broader and more square-tipped tail. Normally the tail of Franklin's consists of sixteen feathers while that of Richardson's has twenty feathers, but these numbers are subject to variation. It shares with Richardson's the popular name of "fool hen" owing to its tameness, and was given its book name in honour of Sir John Franklin, the Arctic explorer. If stupid enough to deserve its popular name, the admirers of Franklin might consider this a doubtful honour. It can be easily distinguished from Richardson's by its smaller size, and from any of the spruce partridges by the lack of a brown bar across the

end of the tail. It is said by some to hybridize with the spruce partridge, and that specimens are found showing the tail-markings of that species.

Canada Ruffed Grouse: *Bonasa umbellus*.

Length: 16 to 18 inches.

Description: The upper parts variegated reddish-brown, the back with some black markings. Tail brown or gray barred with black and tipped with gray, a broad black bar next to the gray tip. Under parts whitish, barred with brown. The neck with a prominent "ruff", that of the male glossy black, that of the female smaller and more brownish. On the whole the colours are very much varied, but the prevailing colour is brown or gray.

Breeding habits: Nest on the ground, mostly of dead leaves. Eggs 10 to 12 or more, plain buff or less often with brown spots.

Season and range: A resident in the woods of the eastern provinces, it extends its range westward through wooded regions to the Rocky Mountains.

This is the so called partridge of the eastern provinces and the wooded districts of the prairies. Of course the name "partridge" does not properly belong to these birds. That is a name belonging to a European species more resembling the quail, but on this continent the name has unfortunately become attached to the ruffed grouse.

No habit of this well known bird has appealed so much to the imagination as his drumming. To see him "strut" or hear him "twit" you must invade his haunts, must visit him in his sylvan solitudes, and only the few care to do that. But that mysterious thumping, whirring sound which comes up from the swamp or out of the wood on a spring day,—oft repeated yet difficult to locate,—arouses interest and stimulates imagination from afar. Many hear it who seldom see the bird, and many have explained it who certainly never saw the bird produce it. Various explanations have



RUFFED GROUSE

been given, perhaps the most widely accepted being that the bird pounds the log with his wings. Thoreau says the one he saw stood on a wall and struck its wings behind its back. An account given in one English "Natural History" by a so-called eye witness to the performance, is that the bird runs or climbs up the trunk of a tree while drumming, beating the trunk with his wings as he goes. On reaching the top he flies back to earth to repeat the operation on the same, or some other, tree.

It may be that the drumming is not always done in exactly the same way, but it is not at all likely that differences in execution at all agree with the differences in explanation. I have seen this drumming many times, and in as widely separated districts as eastern Ontario and Manitoba, and it always seemed the same. The bird seemed to raise the wings partially, stretch them out in front past the breast, and then beat, at first slowly and then with increasing rapidity, until the wings moved too rapidly for the eye to follow. The first beats were very deliberate and often the bird would stop with the wings extended, after giving one or more beats, wait awhile and then begin again. This gave ample opportunity for the observer, at a distance sometimes of not more than twenty feet, to see how it was done, and on at least a few points there could be no mistake. He does not pound the log, nor strike his wings behind him. Nor does he clap his wings against his side "like a rooster". It is also certain that the primaries at least project beyond the body and strike nothing but air. The secondaries, while not projecting beyond the breast, do not seem to be brought in against the sides with each beat. Striking the sides may contribute something to the sound, but is not the main factor in producing it.

It is also plain that the sound gains nothing from any resonating property of the "drumming log". While at

times the log used is high and sound, it is oftener old and decayed. Whether the same bird always uses the same log or not is hard to say, but anyone who as a boy has followed the somewhat doubtful "sport" of shooting partridge on the drumming log in spring, knows a few facts very well. He knows that the same log will be used every season through a long period of years. Some, from their appearance, might have been frequented yearly for a quarter of a century. He also knows that, if a bird is shot off a log, sometimes another will appear using the same log in a few days. Neither is it uncommon for a bird that has been chased off a log to drum in some other location very close by in a few minutes after leaving his usual place.

The ruffed grouse, in at least three different colour variations, extends all across Canada, but these do not affect the habits of the birds. It is not unusual to find birds in which the ruff is rusty red or at least mixed with red feathers. I have seen a bag of 75 birds in which fully one quarter of them had either red ruffs or some red feathers mixed with the black.

Willow Ptarmigan: *Lagopus lagopus*.

Length: 15 to 17 inches.

Description: In winter: Pure white except part of the tail which is black. In summer: Head, and upper fore parts of the body rich brown more or less barred with black. Part of the wings and the rest of the under parts remain white.

Breeding habits: Nest of a few leaves on the ground. Eggs 6 to 12, a dark buff irregularly smeared with dark brown to make them appear very dark.

Season and range: A northern bird breeding north of latitude 55°, but migrating south in winter to the southern edge of the spruce woods.



Male

Female

WILLOW PTARMIGAN

Much need not be said of the willow ptarmigan. It is one of those northern birds that come south in winter to escape in some degree the rigours of the northern climate. It does not seem to leave the spruce woods, but its migration at times reaches to the south of Lake Winnipeg or the valley of the Qu'Appelle.

Pinnated Grouse: *Tympanuchus americanus*.

Length: 16 to 18 inches.

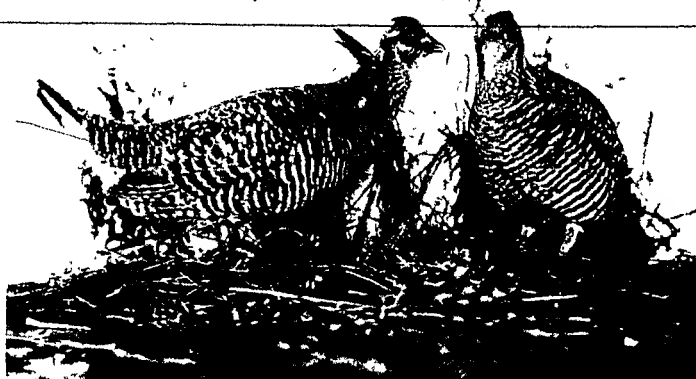
Description: Neck with a peculiar tuft of long loose feathers on each side, and, in breeding season, a circular patch of yellow skin just below the tufts. This can be distended to form the drum or tympanum. Upper parts variegated with whitish brown and black; lower parts regularly barred with dark brown, white and tawny; tail short and round on the end.

Breeding habits: Nest of grass on the ground. Eggs 10 to 20, greenish-gray and smaller than those of the sharp-tailed.

Season and range: A resident throughout the south-eastern part

of the prairie provinces, but rapidly extending its range northward and westward.

The pinnated grouse is a somewhat new arrival on the Canadian plains. Seton says its first recorded appearance was in 1881, when one was shot near Winnipeg. The next year one was shot at Portage la Prairie, and in 1886 it appeared at Carberry. In 1895 it was recorded from Indian



Male

Female

PINNATED GROUSE

Head, and its numbers have rapidly increased and its range extended until it is now a well recognized species over the greater part of the prairie. It is more exclusively a bird of the open than the sharp-tailed, and seems to prefer the somewhat marshy places. As a game bird it is, to a great extent, taking the place of the sharp-tailed, and is commonly spoken of by the hunter as "grouse" to distinguish it from the "chicken".

In the Mississippi valley, where this bird was formerly very plentiful, it is called the prairie chicken, and that is

the popular name given it in the A. O. U. check list. It would be worse than foolish, however, to insist on it being called the prairie chicken in Canada. That name was definitely attached to the sharp-tailed, long before this bird made its appearance on the Canadian plains, and only confusion would result from any attempt to change it.

A peculiar "booming" sound is produced by the male birds during the mating season, and on a clear, frosty, spring morning this may be heard, fairly filling the air for miles. It is as characteristic as the dance of the sharp-tailed or the drumming of the partridge. Although these birds will gather in an open space in considerable numbers while mating, I have never seen them perform as the sharp-tailed does, but that they too have a mating dance is attested by many witnesses.

Sharp-tailed Grouse: *Pediæcetes phasianellus*.

Prairie Chicken.

Length: 18 to 20 inches.

Description: Neck without any ruff or other peculiar feathers, and only very rudimentary, if any, neck drums. Upper parts closely and evenly variegated with whitish brown and blackish. Under parts white with some markings of brown. Head slightly crested. Four middle tail-feathers long, marked like the back, the others shorter and more or less marked with white.

Breeding habits: Nest of grass or leaves on the ground. Eggs 5 to 16, grayish-white, often evenly covered with small brown spots.

Season and range: A resident of the whole prairie region south to Kansas and Illinois.

The sharp-tailed grouse, until recently, has been the most universal, most abundant and most highly prized game bird of the Canadian prairies. It is too well known to need description and too popular to need commendation. Un-

fortunately, it has rapidly decreased in numbers in recent years, at a rate entirely greater than can be accounted for by the toll levied each fall by the "chicken shooter".

Just what is the cause of this decrease is a matter of dispute. Many and varying are the explanations advanced, attributing it to anything or everything from snowy owls to wood-ticks. The crow has come in for the greater part of the blame, but a pamphlet by Mr. P. A. Taverner, published by the Museum section of the Department of Mines, Ottawa, connects it with the periodic decrease of the bluff rabbit or varying hare. These animals are the natural food of the snowy owls, goshawks, and, in fact, all birds and beasts of prey. When they are plentiful their enemies thrive and wax numerous. When the rabbits fail, the flesh-eating birds and beasts turn upon whatever is next most plentiful, the grouse. Facts are advanced to show that the sudden decrease some years ago agreed in time with the decrease of the hare.

To those who have watched the fluctuations in numbers of these and other birds for some time this theory suggests many objections, a discussion of which would lead us beyond our limits. It is more than likely that all explanations that attribute the scarcity of the prairie chicken to a single cause are, if not false, at least not the whole truth. The numerical condition of any species is a result of the action and reaction of a number of forces, some favourable, others antagonistic. It would seem that a number of causes, each tending to reduce the number of the "chicken", have so coincided as to produce their maximum of result about the same time. The coyote and the goshawk may very well be a part, but they are not likely the whole of these adverse forces. To see a flock of sharp-tailed grouse plunge into a snowbank and suddenly disappear, is to be

convinced that they are not without a means of escaping from their enemies whether they prowl by night or fly by day.

There is, perhaps, no one habit of this well known game bird which has attracted so much attention as the "dance" performed while choosing mates. The reason is that some years ago the birds were very plentiful and the dance being in the open and always accompanied by a resonating clucking sound, it attracted general attention and almost every person was able to see it.

Sage Hen: *Centrocercus urophasianus*.

Length: 21 to 30 inches.

Description: Upper parts black, gray, brown and buff much variegated. Under parts white with a square of black. Neck with a tympanum and accompanied in the cock by peculiar plume-like and scale-like feathers.

Breeding habits: Nest on the ground. Eggs 6 to 15, grayish speckled with brown.

Season and range: A resident in southwestern Saskatchewan and southern Alberta and southward.

This "Cock of the Plains" is the largest American grouse, but is not highly valued as a game bird, as its flavour does not add to its popularity. It is essentially a bird of the dry sage-brush plains of the southwest. This bird is so characteristic and unmistakable, it needs no description to be known. In places it has been very plentiful, but only the northern limit of its range enters Canada.

ORDER COLUMBÆ: PIGEONS AND DOVES

FAMILY COLUMBIDÆ: PIGEONS AND DOVES

Birds of the ground or trees, with long strong wings, weak feet, and bill with a peculiar membranous base.

Passenger Pigeon: *Ectopistes migratorius*.

Wild Pigeon.

Length: About 12 inches.

Description: Male: Upper parts bluish-gray. Lower parts reddish with a lustre on the breast and fading to white farther back. Bill black. Feet red.

Female: Lacking the sheen of the male.

Breeding habits: Nest of a few twigs, in trees and collected in immense colonies. Eggs 2, white.

Season and range: Formerly all of eastern North America to the plains, but now extinct.

It is only as a matter of sentiment that the wild pigeon is retained in books on birds, as no specimen has been authentically recorded for years and there seems little doubt that the species is extinct. Its habit of nesting in immense colonies, in locations readily accessible to the pot-hunter for the city markets, led to the slaughter of the young before they could fly, to furnish "squabs" for the tables of the fashionable restaurant. Persecuted in this way the numbers became reduced, the flocks broken up, and the species gave up the struggle.

The pigeons at one time migrated regularly up and down the valley of the Red River, and Coues says: "I witnessed in 1873 another, (flight) of countless thousands on the Red

River of the North." In the early eighties of last century they were fairly plentiful and were found breeding in different places, but by the end of the decade they were practically all gone, and no one can now say that a single bird remains.

Mourning Dove: *Zenaidura macroura*.

Length: About 12 inches.

Description: Plain olive-brown changing to gray, purplish or reddish, with a lustre about the head and neck shading to pinkish on the breast. Outer tail-feathers tipped with white. Lower tail-coverts white. Bill black. Feet red.

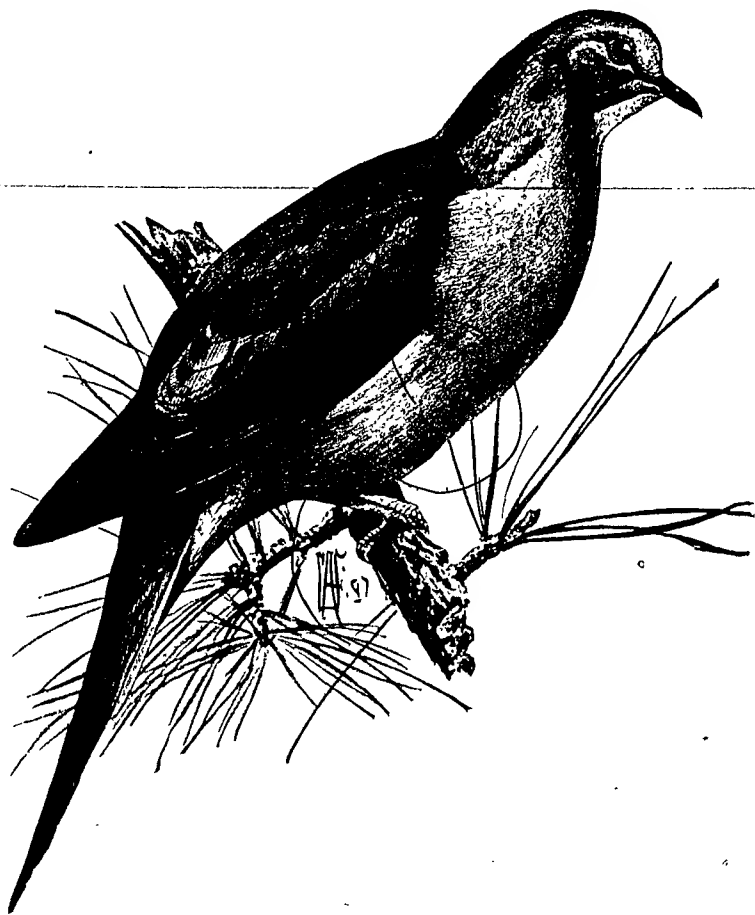
Breeding habits: Nest a frail platform of twigs in a low bush, or the flattened remains of some other bird's nest. Eggs sometimes placed on the ground. Eggs 2, white.

Season and range: A summer resident through Manitoba and Saskatchewan, and extending its range.

This dove was formerly common only in the south-eastern part of the prairie region and nowhere very plentiful. With the increase of grain fields its numbers have increased and it is becoming quite plentiful in places, while its range is being rapidly extended. Districts in northern Manitoba, where it was unknown fifteen years ago, now have it in abundance. While the nest is generally in a bush, it will nest on the ground, even when bushes and trees are plentiful. A few years ago, I found a nest in the side of the railway embankment about three miles west of Brandon, although there was plenty of bush in the vicinity. This habit has been noticed by others but is not very common.

It is a beautiful, modest, and apparently affectionate kind of bird, but notoriously lazy about building a nest. Any sort of rough platform will do, and it would no doubt add to the comfort of the young if the eggs were always placed on the ground.

The name "mourning dove" has no doubt been given on account of its mournful note, a sort of moan repeated usually three times in succession.



MOURNING DOVE

ORDER RAPTORES: BIRDS OF PREY

Flesh-eating birds, usually with talons and hooked bill.

The birds of prey are a well marked type, distinguished by their strong hooked bills and claws in the form of talons. With these talons they catch their prey which they tear to pieces with their hooked-bills. This group is not popular, but in earlier times, when strength and ferocity were regarded as among the greatest of human virtues, they appealed strongly to the imagination. Many of the ancient poets have found in the strength and speed of the eagles a fit subject for their muse, and artists have used them to symbolize death, strength or victory. It is probably as an emblem of victory that the eagle is found so frequently on flags and coins.

It may be a sign of advancing civilization that the sweet singers appeal more to modern poets than the birds of prey, yet it is not a mark of high intelligence that all of the latter should be regarded as evil-doers. Such birds have a place in nature, keeping in check many injurious animals, while only a few do any harm. We should know our friends among all the birds, even the birds of prey.

Head naked, toes not in form of talons.

Family Cathartidæ: Vultures. Page 123.

True birds of prey, with no tooth on the upper mandible.

Family Buteonidæ: Hawks and Eagles. Page 124.

True birds of prey with a tooth on the upper mandible.

Family Falconidæ: Falcons. Page 138.

Large Hawks that live on Fish.

Family Pandionidæ: Ospreys. Page 144.

SUBORDER SARCORHAMPHI: AMERICAN
VULTURES

Carrion-eating birds.

FAMILY CATHARTIDÆ: VULTURES

Carrion-eating birds with naked heads, weak, only partially hooked bills, and feet adapted for walking; in some respects resembling gallinaceous birds in structure.

Turkey Vulture: *Cathartes aura septentrionalis*.

Turkey Buzzard.

Length: 27 to 30 inches.

Description: General colour brownish-black with traces of gray on the edges of the feathers. Head naked, red. Bill white. Feet flesh-coloured.

Breeding habits: Nest on the ground or on low stumps or logs, and often in colonies; occasionally in trees or in high cliffs. Eggs 2, creamy spotted with brown.

Season and range: A visitor or summer resident across the prairies. Apparently widespread in its distribution but nowhere plentiful. It is reported from along the eastern boundary of Manitoba to north of Edmonton, and many places between.

This bird of ill repute and filthy habits visits us regularly but not plentifully. It is liable to be found wherever carrion or any animal refuse exists, frequently about slaughter houses. There are numerous records of it nesting in southern Saskatchewan and Alberta, and at least two in Manitoba, but it is never plentiful.

It forages so widely for food that its appearance in any locality does not always indicate that it is nesting there.



TURKEY VULTURE

Rowan reports seeing it constantly around Shoal Lake and at High Lake. I have visited that locality and did not see it. The nest may have been far away. Yet it must nest in the province, but the only records I can find are in the extreme North East, and in the vicinity of the Duck and Riding Mountains.

A specimen in our collection was taken at Oak Lake, Manitoba, in the fall migration.

SUBORDER FALCONES: FALCONS, HAWKS, BUZZARDS AND EAGLES

*True birds of prey with no ruff of feathers to form
a face-disc*

FAMILY BUTEONIDÆ: HAWKS AND EAGLES

Real birds of prey with talons and strong hooked beaks.

The hawks are the best known birds of prey and they have a bad reputation for destroying other birds. The fact is that only a certain number of them are really troublesome. The family comprises two fairly distinct groups. The buzzards, harriers, rough-legs and eagles are broad-winged, rather large birds, mostly flying low and hunting by searching the ground. These seldom molest other birds and are much more beneficial than harmful. The other group includes the sharp-shinned, Cooper's, and the gos-

hawk. They never soar or fly about close to the ground in search of prey. They remain concealed the greater part of the time, and, having located their prey, fly directly to it and carry it off. They are both swift and daring and are guilty of nearly all the mischief done by hawks, although they never seem plentiful. One of these birds will visit the same yard repeatedly, carrying off chickens, and yet be seldom seen. A third group, the falcons, are not plentiful enough to do much harm.

Marsh Hawk: *Circus hudsonius*.

Length: 16 to 19 inches.

Description: Male: Upper parts bluish-gray, the upper tail-coverts white and the tips of the wings dark. Lower parts bluish in front, fading to white farther back, with faint brownish spots. Wings long and tapering with white linings. Most specimens have a brownish cast overlying, and, to some extent, obscuring the general bluish-gray colour.

Female and young: Upper parts brown variegated with different shades. Upper tail-coverts white. Under parts streaky-brown.

Breeding habits: Nest of grass on the ground in marshy places.

Eggs, 4 or 5, whitish sometimes marked with brown.

Season and range: A summer resident about marshes across the prairie.

This is one of our commonest hawks, but the male in full gray plumage is not often seen. In the brown plumage the bird can be easily distinguished from other hawks by the conspicuous white upper tail-coverts.

The marsh hawk belongs to a group of hawks known as harriers or ground hunters, from the habit of flying low watching for snakes, frogs or small rodents, which furnish its food. It is known as the "blue harrier" or "brown harrier" according to the colour. It is really a very harm-



YOUNG MARSH HAWKS IN THE NEST

less bird, being too weak in the talons to carry off any prey of large size. While flying over the marshes it will dart at ducks, but I have never known it to attack an uninjured bird. It will, however, gather up the wounded birds. Sometimes it mistakes a weasel for a gopher and always to its own undoing.

This hawk is sometimes shot by the novice who carries a gun, but is well known and seldom molested by the man familiar with the marshes, and who goes out for sport, not slaughter.

I have had it strip a lot of feathers off ducks I had left on a pile of hay. Always since that I have tried to put the ducks under the hay, not on it.

Sharp-shinned Hawk: *Accipiter velox*.

Length: 12 to 14 inches.

Description: Upper parts dark bluish-gray with a tinge of brown on the wings. Under parts whitish barred with reddish. Tail square on the end, white-tipped and crossed by four blackish bars. Feet slender and weak.



SHARP-SHINNED HAWK

Breeding habits: Nest a platform of sticks generally placed well up in a tree, but may be on a cliff. Eggs 4 or 5, purplish-white marked with brown.

Season and range: A summer resident across the prairie.

No hawk has done more than the sharp-shinned to give a bad reputation to the whole class. While one of the smallest, it is also one of the fiercest and most destructive, almost its entire food being other birds. Owing to its speed and fierceness it can carry off and devour a bird as large as a pigeon, and frequently preys upon partly grown chickens. It is a great mistake to think the large hawks are the most destructive. Very little harm is ever done by any of the larger species, but this and the next two are the most destructive of the race.

Of these three hawks the sharp-shinned is the smallest and most plentiful. It may be told from Cooper's by the square end on the tail, but speaking generally all small hawks should be looked on with suspicion.

Cooper's Hawk: *Accipiter cooperi*.

Length: 15 or 16 inches.

Description: Colouring much as in the preceding, but a larger bird with stronger and stouter feet and talons. The tip of the tail is rounded.

Breeding habits: Nest in tops of trees. Eggs 3 or 4, bluish-white and may be spotted with reddish-brown.

Season and range: A summer resident across the prairies keeping in the vicinity of woods.

Cooper's hawk closely resembles the sharp-shinned in appearance and these two resemble the goshawk in habits. In fact they are small editions of the latter. In all these hawks the female is larger than the male, and a small male Cooper's may be almost as small as a large female sharp-shinned. On the other hand a large female Cooper's is sometimes as large as a young male goshawk.

This species is more destructive than the last because, being larger, it is able to carry off full-grown prairie chickens and poultry. Fortunately, it is not a plentiful species over the greater part of the prairie. Its somewhat larger size and the rounded tip of the tail will distinguish it from the sharp-shinned.

American Goshawk: *Astur atricapillus*.

Blue Hen Hawk.

Length: 20 to 24 inches.

Description: Upper parts dark bluish-slate colour, the feathers with black shafts; top of head blackish; a long whitish line above the eyes; under parts whitish, closely barred with narrow zigzag lines of brown. The young dark brown, marked with whitish above; whitish tinged with tawny and brown markings below, somewhat resembling the adult of the two preceding species.

Breeding habits: A nest of sticks lined with finer material, placed well up in a tall tree. Eggs 4, bluish-white, sometimes with faint brown spots.

Season and range: A resident or winter visitor through that part of the prairie region where trees are plentiful.

This is one of the largest, and certainly the fiercest and most destructive, of all our hawks. It rarely nests in the southern part of the Canadian prairie region and so its depredations are not as serious as they would be, if the appetites of the growing young had to be satisfied by toll from the poultry yard. As a winter visitor it is not uncommon in the vicinity of woods. Students frequently report having seen a "black hawk" in the winter, and not infrequently a farmer sends in for identification the frozen body of a hawk that was stealing his chickens, until its career was ended by the shotgun.

The adult is a handsome bird, but does not reach full plumage the first year. Being essentially a bird of the woods it is not troublesome except near timber, and it

nests in timbered regions all across the northern part of the continent.

Coues says of this bird: "A large, powerful, and in perfect plumage, a very handsome hawk, of splendid spirit, combining ferocity with audacity in the highest degree, and the terror of the poultry yard, where it does more damage than any other hawk or than the great horned owl; it habitually preys upon birds up to the size of grouse and ptarmigan, and mammals as large as hares."

Red-tailed Hawk: *Buteo borealis*.

Hen Hawk.

Length: 19 to 22 inches.

Description: Upper parts dark brown or blackish variegated with lighter colours of reddish, gray or whitish. Upper tail-coverts white and yellowish. Under parts yellowish, with black markings on a ground colour of white, but the dark going almost or quite around the neck. Tail, chestnut-red above, with a white tip and a black band above the white; in the female more than one dark bar. Young without the red tail. Four primaries deeply notched.

Breeding habits: Nest a bulky structure of twigs high up in a tree or on the edge of a cliff. Eggs 2 to 4, whitish, generally spotted with brown.

Season and range: A summer resident breeding throughout the wooded portions of the prairie region and quite numerous in migration.

The genus "buteo" comprises a number of large hawks, commonly called buzzards. They are large birds, fly rather slowly, often sailing high in the air, and being birds of the open, they get the blame for depredations which are mostly committed by the smaller "accipiters" or the goshawk. The latter remain under cover of the trees and only sally out when the prey is located, but the buzzards, like the harriers, hunt by flying slowly and at no great height. They are thus easily seen and easily shot, and so suffer severely for sins they rarely commit.

These large hawks all pass through different colour phases in plumage and are difficult to distinguish. Some phases are so dark as to seem almost black and others are quite light and reddish. The two largest and most likely to be confused are the red-tailed and the next species, Swainson's buzzard. In size they are almost equal, although Swainson's is slightly smaller and is altogether a less robust bird. It is essentially a bird of the open prairie, while the red-tail keeps in or near the woods; and in any plumage they may be distinguished, as Swainson's has only three primaries deeply notched while the red-tail has four. There is another of these large hawks that has four notched primaries, the red-shouldered or *buteo lineatus*,—but it is an eastern bird, very rare in Manitoba and not found farther west. Krider's red-tail is a lighter colour variation of the common red-tail. It is ranked as a subspecies under the name *buteo borealis kriderii*, but owing to the variety of plumage in the whole species it is not always possible to distinguish it. Both types occur in the prairie provinces, but it may be that the true *borealis* is confined to Manitoba and eastern Saskatchewan, and that *kriderii* is the form found farther west.

The food of these hawks is almost exclusively small rodents, chiefly gophers. Their value to the farmer is infinitely greater than the small damage they do by occasionally carrying off a chicken. Mr. Taverner in speaking of these hawks as he saw them in Alberta says:

"It is true that some of these hawks take an occasional fowl or game bird, but of 630 stomachs examined, of the species under consideration, (Red-tails) only 54 contained fowl or game birds. Of these, 34 were taken in late autumn, winter, or early spring when gophers were not procurable, and the remaining 20 were from eastern localities where gophers do not occur. In the itemized record given, every

bird taken in gopher country had fed upon rodent species almost exclusively."

He calculated that a family of these birds would destroy 350 gophers in a season, and in a country where gophers abound they scarcely ever feed on anything else. Yet the farmer shoots these birds just because of the fixed idea that all hawks are injurious.

Swainson's Hawk: *Buteo swainsoni*.

Length: 19 or 20 inches.

Description: Upper parts dark brown varied with lighter brown or reddish, but varying greatly in shade according to the age and season. Under parts whitish, the male with a broad band of bright chestnut across the breast and a pure white throat. The female is larger than the male, much darker beneath and the breast is brown instead of chestnut, but has the white throat.

All the plumage is subject to much variation for age, sex and season. The plumage of the young is particularly variable, but mostly brown above and white or yellowish white beneath, spotted with brown.

Breeding habits: Nest of sticks, sometimes lined with green leaves and generally in a bunch of willows or some low tree in the edge of a grove, but may be on the edge of a bank. Eggs 2 to 4, unmarked and not unlike a hen's eggs.

Season and range: A summer resident on the open prairie across the three provinces.

This is the bird which is frequently called the "prairie hawk". It may be seen sitting on the mounds thrown up by the gophers and it feeds almost exclusively on small rodents. Yet no hawk is so commonly shot as this, because it is the easiest mark. One writer reports counting nine dead buzzards along a trail in less than half a mile, the victims of the general prejudice against hawks, or of the instinct to kill which some people seem to have.

The great variety of plumage through which birds of this

genus pass makes them hard to identify with certainty when on wing, but a large slow-flying hawk frequenting the open prairie is almost always Swainson's buzzard. The three notched primaries readily distinguish it from the red-tail, if in the hand.

Broad-winged Hawk: *Buteo platypterus*.

Length: About 14 inches for the male, but the female may be 18 inches long.

Description: Dark brown, more or less variegated with grayish above, the upper tail-coverts marked with white. Tail with three dark bars alternating with three lighter, a light bar at the tip. Under parts white mixed with reddish-brown, the reddish predominating on the breast. Wing-linings white mixed with reddish or blackish spots. Three primaries deeply notched.

Breeding habits: Nest in a tree similar to that of the red-tailed. Eggs mostly 2 or 3, grayish or greenish-white marked with brown.

Season and range: A rather rare summer resident in wooded districts across the prairie.

This is a typical buzzard in form and habits, but it is much smaller than the others. Like all the others it varies greatly in plumage, but its size should easily distinguish it from other hawks of this type. It is a woodland species like the red-tail, but has only three notched primaries like Swainson's. These points,—size, locality frequented and the notching of the primaries,—should distinguish it in any plumage. It is an eastern species, not at all common even in Manitoba and less so farther west.

Rough-legged Hawk: *Archibuteo lagopus*.

Length: 20 to 22 inches.

Description: Plumage so variable as to be difficult to describe. On the whole dark brown or blackish, varied with lighter colours. Legs feathered to the toes.

Breeding habits: Nest of sticks lined with softer material, in a tree or on the edge of a cliff or bank. Eggs generally 3 or 4, dully white or clouded with brown.

Season and range: A rather uncommon migrant across the prairie and not known to breed south of the wooded district.

The rough-legged hawks differ from the three preceding by having their legs feathered down to the feet. In other ways they resemble them and are also called buzzards, a name which is given to all large, slow-flying hawks. This hawk, often called the American rough-legged, is not plentiful at any time, and breeds only in the northern woods. Its plumage is so variable that it is hard to describe, but on the whole it is very dark and often called the "black hawk". This dark colour readily distinguishes it from the next species; the only one with which it is possible to confuse it, owing to the feathers on the legs. It is fairly safe, therefore, to say that any dark hawk with feathered legs is the American rough-legged.

Coues describes this bird as "a large, heavy, and somewhat sluggish hawk, hunting meadows and marshes, to some extent crepuscular (flying in twilight) in habits, of low, easy, and almost noiseless flight; preying upon insignificant quarry, particularly small rodent and insectivorous mammals, reptiles, batrachians and insects." Such a bird surely does no harm, but where gophers abound may do much good and should be protected.

Ferruginous Rough-leg: *Archibuteo ferrugineus*.

Length: 22 to 24 inches.

Description: Upper parts blackish, mixed with bright reddish in about equal amounts, but varying much in distribution. Lower parts, including the lower side of the tail, pure white or with some flecks of chestnut. Legs feathered to the toes, and freely speckled or barred with chestnut or black.

Breeding habits: Similar to the preceding, the eggs of the two species being hard to distinguish.

Season and range: A summer resident not plentiful in Manitoba but much more so farther west.

This very large hawk, although variable in plumage, always shows the red colouring above and the white below. In the young the white may not be very pure, but the bird is never dark enough to be mistaken for the last, and the feathered feet will distinguish it from the others. It is, therefore, one of the easiest to determine.

The habits are identical with those of the rough-legged, and from the farmer's standpoint it is more valuable, as it breeds throughout the settled region, while the other species, being a migrant, is not with us when the gophers are most plentiful.

This hawk is not infrequent as a breeding species in Manitoba, being found in the wooded ravines along the Assiniboine and Souris rivers, and other places where there are high trees. More than once I have been called upon to identify this "strange hawk" which someone was anxious to show as a sample of his skill, little knowing that he had slaughtered one of the farmers' best friends and one of nature's most perfect products.

Golden Eagle: *Aquila chrysaëtos*.

Length: About 3 feet or more.

Description: Dark brown with a very slight gloss of purple, a little lighter on the wing and tail-coverts. The long feathers on the back of the neck golden brown with light coloured tips. Tail in old birds white towards the base with a broad black band at the tip. Young much darker than the old and without the white on the tail. Legs feathered to the toes.

Nesting habits: Nest a bulky platform of sticks, usually on a

jutting rock on the side of a cliff, but may be in a tree.
Eggs 2 or 3, white or whitish, spotted with brown.

Season and range: A somewhat rare migrant or winter visitor throughout the prairie but breeding in the Rocky Mountains.

The golden eagle of America is a powerful bird, altogether superior to the same species in Europe. It is the true eagle and is nowhere plentiful, generally breeding in northern mountainous districts far from the haunts of man. It is occasionally met with on the prairie, and may possibly

breed at times in remote hilly regions. Like the hawks it is variable in plumage, and at some stages may be confused with the young of the next species. Only the adult has the characteristic golden brown cowl and the black and white tail which have given it the names of "golden" or "ring-tailed" eagle. Old birds, too, are much lighter than the young, but in any plumage its size and feathered feet



GOLDEN EAGLE

will distinguish it from any other bird.

Many stories are told of the fierceness of this bird and its power to carry off various kinds of animals, but they are mostly imaginary. While quite capable of carrying away a young lamb, it seldom does so, and its usual food is much the same as that of the larger and fiercer hawks. The bird in our collection had a full-sized muskrat in its stomach when it was killed.

Northern Bald Eagle: *Haliaeetus leucocephalus*.

Length: About 3 feet.

Description: Dark brown with white head and tail and yellow bill and feet. The legs not feathered down to the toes. The young are very dark with no white head or tail and may be confused with the preceding. It takes three years to acquire the adult plumage of the typical "bald" eagle.

Breeding habits: Nest a bulky structure of sticks, generally added to year by year, and placed in a high tree, but may be on a cliff or bank. Eggs 2 or more, rarely 3, white and differing in size.

Season and range: Very similar to the preceding but most plentiful on the sea coast or around large bodies of water. Very rare on the prairie but breeds in northern Alberta.

This is the eagle we hear most about. It is more universal in its distribution than the preceding, and, from its habit of frequenting sea coasts and lake shores, is easily seen. I have counted half a dozen of these birds on the coast of the Gulf of Georgia, nearly all adults with white head and tail, and all in sight at one time from the deck of the steamer. As in nearly all birds of prey "the female of the species" is larger, fiercer and more powerful than the male, and, some claim, is hatched from the larger egg found in the nests.

Much has been written about the nobility of this bird, but this is based more on appearance than habits. It lives almost entirely on fish, and seldom, if ever, attacks and carries off a living bird or mammal. It will catch snakes, eat dead fish or other carrion, and follow the fish-hawk to steal what he catches. Its fishing for itself is limited to picking suckers out of a very shallow stream, or gathering up small fish left in shallow pools by the receding tide. Altogether its method of getting its living is not one which indicates any great nobility of character. It exhibits



Mature

Juvenile

BALD EAGLE

neither resourcefulness nor courage to any high degree.

The young of the two eagles closely resemble each other, but may always be distinguished by the legs of the "golden" being feathered to the toes while those of the "bald" are not.

FAMILY FALCONIDÆ: FALCONS AND
GYRFALCONS

Rather small fierce hawks of rapid flight that capture their prey on wing. Readily distinguished by the upper mandible having a notch on each side near the point and the lower mandible shortened.

The falcons are the birds which were used in the Middle Ages for hunting. They are swift and daring, but, as

their prey must be on wing, they never molest domestic fowl, although some of them are very destructive to other birds.

Black Gyrfalcon: *Falco rusticolus*.

Length: About 20 inches.

Description: Upper parts blackish, slightly variegated with lighter, under parts mostly dark but lower tail-coverts spotted with white. In some cases almost black throughout. Legs feathered on the front and sides for two thirds of their length.

Breeding habits: Nest on cliffs in the far north. Eggs 3 or 4, heavily marked with various shades of brown hiding the ground colour.

Season and range: A rare winter visitor.

The gyrfalcons are birds of the far north which range south occasionally in winter. They pass through a wide range of colour variations, from light gray to almost black. These have been separated into different sub-species and are popularly known as "white", "gray" and "black" gyrfalcons. The birds do not seem to differ either in size or habits and their distinction is not well determined. Coues says: "I suspect the truth to be, in respect to all gyrfalcons, that there is but a single circumpolar species; that with specimens enough an uninterrupted series could be established connecting the blackest "obsoletus" with the whitest "candicans", and that the races which most ornithologists recognize are not coincident with geographical areas."

There are numerous reports of gyrfalcons being taken on the prairies during winter, but many of these are more or less uncertain. Seton, in his "Birds of Manitoba" admits the black gyrfalcon with some reservations, but later, in "The Auk" says, that since his book was written, "two fine specimens have been taken and are now in the Manitoba museum". Unfortunately that collection has since

been destroyed by fire. Some years ago a very black hawk with a reddish tail was sent me, which from the notch on the bill was evidently a "falco" and must have been this species, probably immature. It was so identified by a taxidermist. The specimen was in bad condition and was not preserved. There seems, however, to be no doubt that at least the gray and black gyrfalcons visit us occasionally in winter, but their occurrence is rare.

Prairie Falcon: *Falco mexicanus*.

Length: About 18 inches.

Description: Upper parts brownish-drab variegated with lighter edges on the feathers. Under parts white marked with brown except on the throat. Wing-linings mostly white. Tail with a white tip. Legs feathered in front for about half their length. Bill dark bluish and yellow. Feet yellow. Young more brown above and more spotted beneath.

Breeding habits: Nest on cliffs. Eggs 3 to 5, creamy-white clouded with brown.

Season and range: A summer resident on the open prairie of south-western Saskatchewan and southern Alberta and more rarely in southern Manitoba.

This is one of the most spirited hawks of the genus, and is the American representative of some of the best known hawks of Europe. It is quite plentiful on the dry plains of Arizona and Wyoming, but its range does not pass far north of the international boundary. It nests on the high cliffs formed by the cutting away of the river banks, often laying its eggs on the bare ground.

Duck Hawk: *Falco peregrinus*.

Length: About 18 inches, the female sometimes slightly more.

Description: Upper parts uniform, rich, dark, bluish-slate colour shading to bluish or slaty-black. Under parts varying from white to buff, unmarked on the throat, the white

running up the sides of the head, below the throat the white marked with dark spots or bars. Tail and upper tail-coverts barred with blackish and gray. Wing tips blackish. Legs feathered only a short way down the front. Toes very long. Bill bluish-black. Young resembling the adult, but streaked rather than barred below.

Breeding habits: Nest on cliffs or in hollows high up in trees. Eggs 3 or 4, variously clouded with yellowish or brown hiding the ground colour.

Season and range: A migrant or possibly summer resident, more plentiful in the western part of the prairie than in Manitoba.

This is the true peregrine falcon of America, the most typical bird of the whole genus and a worthy representative of the hunting hawks of the Middle Ages. It is unequalled for skill and courage and will attack its quarry on the wing, carrying off birds larger than itself, its very long talons enabling it to grasp its prey. It migrates regularly north and south, following the duck migrations of the spring and fall, and preying, not only on the ducks, but on the larger shore birds.

The duck hawk is easy to distinguish by its peculiar bluish-gray colour, its long tapering wings, its speed and the dash with which it attacks even large birds by dropping on them from above. It is not a plentiful species in Manitoba, but farther west is common around all the lakes during the migrating season.

Pigeon Hawk: *Falco columbarius*.

Length: About 11 to 12.5 inches.

Description: Male: Upper parts bluish-gray, each feather with a black shaft. Tail tipped with white and barred with bluish-gray and black. Under parts whitish, usually pure white on the throat and tinged with yellowish and streaked with brown farther back.

Female: Upper-parts uniform brown, varied with paler edges and black shafts of the feathers. Tail tipped with white, barred with brown and whitish or yellowish. Under parts whitish streaked with brown. This is also the plumage of the young, and the male except in the breeding season, and is very variable.

Breeding habits: Nests on cliffs, in holes in trees or in the branches. Eggs 4 or 5, varying from brown to whitish.

Season and range: A summer resident across the prairie but not plentiful.

This little falcon has all the dash and courage of its race and preys on all kinds of small birds. In the north it is said to feed largely on the ptarmigan. It gets its name, not because it has a special fondness for pigeons, but because of a certain amount of resemblance to that bird in its flight. It is never very plentiful but is universally distributed, and I see it quite frequently attacking the house sparrows at Brandon, coming into the edge of the city for that purpose.

Richardson's pigeon hawk, sometimes known as the American merlin, is a western form in which the bluish-gray of the back is replaced by brown. The other markings are almost the same as in the common pigeon hawk but the colours not as pure, the white of the lower parts being tinged with yellow and streaked with black.

This hawk, like many other birds, was named after Sir John Richardson, who was surgeon and naturalist to Sir John Franklin's first and second Arctic Expeditions, and commander of the expedition sent out in 1848 to search for Franklin. It is an interesting species between the common pigeon hawk and the European merlin, and is a fairly common breeding species in western Alberta, getting gradually less plentiful eastward across the plain.

Sparrow Hawk: *Falco sparverius*.

Length: 10 to 11 inches.

Description: Back, and generally a spot on the top of the head, reddish-brown, the back barred with black in the female and sometimes spotted in the male. Crown and wing-coverts ashy-blue in the male, brown barred with black in the female. Tail bright chestnut with a white tip and a broad black band back of the white, the outer feathers mostly white; in the female the whole tail marked with short black bars. Underparts white tinged with buff, only slightly if at all spotted in the male, but streaked with brown in the female. Young not much different from the adults.

Breeding habits: No nest, the eggs deposited in a deserted woodpecker's nest or some such hole in a tree, or sometimes in a bank. Eggs 3 to 7, creamy blotched with brown.

Season and range: An abundant summer resident across the prairies.

This little hawk is too well known to need much description. Like all the hawks its plumage varies greatly in detail, but the bird itself is unmistakable. It has all the dash and speed of its race but lacks



YOUNG SPARROW HAWK AT THE NEST.

the strength to attack any large quarry, and even birds the size of the sparrow seem beyond its power. I have watched it many times making dashes at small birds, but never saw it capture one. It feeds on mice to a limited extent, but mostly on grasshoppers and other insects. This seems poor fare for a bird with the family connections of this hawk, but it should make it more popular. We can enjoy its poising and darting at other birds, when we know it seldom or never strikes, and the good it does in devouring insects should make its place in the economy of nature secure.

The desert sparrow hawk is a western form which differs very slightly from the type and is not generally recognized as a separate species. It frequents the semi-arid regions of the western plains and mountains, and the northern part of its range extends into Canada, where it is found along with the common sparrow hawk in south-western Saskatchewan and southern Alberta.

FAMILY PANDIONIDÆ: OSPREYS

A family represented in America by a single species.

Osprey: *Pandion haliaëtus*.

Fish Hawk.

Length: About 2 feet.

Description: Upper parts dark brown, the feathers edged with lighter colour. Tail brown with darker bars and white tip. Head, neck and under parts white, the crown with dark streaks. The colouring is variable, the breast at times spotted or yellowish, and all distinctive markings becoming obscured in old birds. Bill dull black. Feet grayish-blue, with black claws.

The young are darker and more mottled with white.

Breeding habits: Nest a bulky structure of sticks, generally added to yearly, placed in trees, more rarely on cliffs or even on the ground. Sometimes in colonies. Eggs generally 2, white or creamy and variously marked.

Season and range: A summer resident around large bodies of water. A bird of most universal range.

There are few birds of more general distribution than the fish hawk and in places it is found in large numbers. My own acquaintance with it is confined to the smaller inland waters of northern Ontario. No lake with fish in it is complete without a pair of these birds, but the food supply under such conditions is not sufficient to support large numbers. I have never seen more than two pairs nesting in the same vicinity. The natural place for its nest is in a large tree, but where fish are plentiful and trees scarce, it will resort to other building places. The habit of returning year after year to the same place and repairing the old nest makes these structures sometimes grow to unwieldy proportions. So large do they become that other birds build nests in the crevices between the interlaced sticks, and remain unmolested by this great bird of prey. Its taste seems to be entirely for fish, and it is so careful in selecting a good source of supply and is so skilful a fisherman, that I have never heard of it having to resort to any other food.

This bird's great stretch of wing,—about five feet,—and its white head lead to it being confused at times with the bald eagle. That is not its only relation to the so-called noble bird, for it often has to fish for the eagle as well as itself, the latter being able to do only the very simplest kind of fishing; but it is big enough to bully the more skilful bird out of its lawful catch. I always want to shoot the eagle when I see it hanging about the fish hawk.

The osprey fishes like the tern. It locates its prey near the surface, poises to get the exact position and estimate the distance, then up go the long tapering wings so as to offer the least possible resistance to the air, and down it drops, feet first, rising from the shower of spray with the fish in its talons. The difference in their methods seems to be that the tern catches with its beak and so must dive head first. The sight of the osprey must be keen, for it will drop from a height of a couple of hundred feet on an unwary sucker swimming near the surface.

SUBORDER STRIGES: OWLS

Nocturnal birds with large eyes and a ruff of feathers forming a face-disc.

Their feathers are very soft, almost hair-like, making their flight noiseless, and they are guided largely in their hunting by a particularly acute sense of hearing. Some of them are very fierce and destroy large numbers of other birds. One species, the great horned owl, will visit hen roosts at night. On the whole, however, the owls feed on small rodents and insects, and are more beneficial than harmful.

FAMILY STRIGIDÆ: ALL OWLS EXCEPT THE BARN OWLS

*Long-eared Owl: **Asio wilsonianus.***

Length: 14 to 16 inches.

Description: Upper parts brownish-black mottled with whitish. Under parts a mixture of brown, whitish and yellowish, the breast pattern large, on the other parts small. Face-disc tawny with a black ring speckled with white. Ear tufts long and conspicuous.

Breeding habits: Nest in a tree, generally in an old crow's nest.
Eggs 4 to 6, white.

Season and range: A common summer resident in wooded districts across the prairie.

The long-eared owl is one of our commonest breeding species. It may be found occupying old crows' nests in almost any wooded river valley or deep bluff. It is purely nocturnal and so is seldom seen except when the seclusion of its woodland haunts is invaded. Then, if the nest is approached, it will erect its ear tufts and call its mate with a sound somewhat resembling the mew of a cat. This has led to it being called the cat owl.

The food habits of this bird are entirely to its credit. Mice and nocturnal insects constitute its bill of fare. It has never been known to visit chicken-roosts and seldom molests any small bird.

Short-eared Owl: Asio flammeus.

Length: Male about 14 inches, female larger.

Description: Upper parts and breast variegated in brown and yellowish, mostly in streaks. The rest of the under parts pale and yellowish getting lighter towards the tail. Wing-linings mostly whitish. Face-disc whitish with conspicuous black eye patches. Ear-tufts very short and scarcely noticeable.

Breeding habits: Nest on the ground, of grass and feathers.
Eggs 4 to 7, dull white.

Season and range: A summer resident across the plains, common about marshes.

This might well be called the marsh owl, as it prefers fairly dry marshes to the uplands. It is a bird of the open places, while most other owls seek the seclusion of the thick woods. Unlike most of its race, too, it quite frequently hunts by day, but also flies at night or in the deepening

twilight. When out on the duck marshes in the fall this is the owl that will "sit close" in the grass until one is quite near, then rise slowly, fly a short distance and alight in the grass again. This habit often costs it its life, as too many guns are always ready for any bird that rises.

This is a plain, unassuming, but particularly useful bird, preying upon mice and insects, never attacking poultry, and but seldom molesting any other bird. Mice seem to be its chief source of sustenance.

The noiseless flight of the owls and their keen sense of hearing are both well illustrated in this bird. The ear opening on the side of the head is very large, which no doubt has to do with its sense of hearing being so sharp. Just at twilight this owl may be seen, but not heard, flying rather low over the marsh, the silence of its flight having an effect which is almost uncanny. Suddenly it will turn off to one side, poise and drop on an unsuspecting mouse. It seems guided by hearing more than sight, as the prey is often concealed by the grass, yet it is located with the utmost accuracy.

Barred Owl: *Strix varia*.

Hoot Owl.

Length: 18 to 20 inches.

Description: Upper parts brown, barred with white or yellowish.

Breast similar to upper parts. Belly white or yellowish, streaked lengthwise with dark. Face-disc large, arranged in two sets of concentric rings, the eyes being the centres, and the whole surrounded by a speckled ring.

Breeding habits: Nest generally in hollow trees, but may be in a deserted crow's nest. Eggs 2 to 4, white.

Season and range: A rare summer resident in Manitoba.

The barred is one of the most striking, but most uncommon of our owls, being almost entirely an eastern

species. It is strictly nocturnal and a bird of the deep woods and so is seldom seen. This is the bird that, more than any other owl, utters the loud *hoot-hoot-hoo-hoo-oo* and the bursts of wild laughter so familiar in the eastern woods, particularly in early spring.

It extends its range westward to the wooded districts of Manitoba, but apparently is scarce. Its habits might account for it being seldom seen even if plentiful, but if it were here it would be heard. I have seen a couple of specimens said to have been taken in the province, but never saw the living owl here. Seton admits it as a rare resident, and Atkinson says: "I have two records of this species for Manitoba, one at Ochre River, the other within the Portage la Prairie town limits."

Great Grey Owl: *Scotiaptex nebulosa*.

Length: About two feet.

Description: Above, dark brown mottled with grayish-white. Under parts paler, the breast streaked. Bill and claws yellow. Facial disc brown and gray in concentric rings above each eye. Feet feathered to the claws.

Breeding habits: Nest of sticks, grass and feathers, in trees. Eggs 2 to 4, dull white.

Season and range: Usually a rare winter visitor.

This spectral bird is one of the largest of the owls, but largely because of its loose coat of feathers. It is a bird of the northern woods, coming to us only in winter and then very irregularly. Some winters it may be locally common, and the next be entirely wanting in the same locality. It is always more likely to be seen in the vicinity of heavy timber, as it seldom frequents the open spaces.

"During the winter of 1895-6 Mr. Dippie and myself received over a dozen of these birds in the flesh that were shot in Alberta. We also received about fifty American

hawk owls in the flesh that same winter. Settlers informed me that the whole of Alberta swarmed with owls, and they remained until April, when all migrated north except one pair of great gray owls which remained and nested in the Red Deer River district, and Mr. Dippie secured the eggs along with the parent, which is probably the only record of this bird ever nesting as far south, as its summer home is along Great Bear Lake and northward. It breeds at the mouth of the Mackenzie River, Arctic America, making a nest of sticks and weeds in the highest spruce trees it can find."—Raine.

Richardson's Owl: *Cryptoglaux funerea*.

Length: 10 to 12 inches.

Description: Whole upper parts uniform ruddy or chocolate-brown spotted with white; under parts white streaked lengthwise with black. Face-disc white, set in a frame of brown speckled with white. Eyelids blackish. No ear tufts.

Breeding habits: Nest in holes in trees, often in deserted woodpeckers' nests. Eggs 3 to 7, dull white.

Season and range: A resident or winter visitor.

Richardson's owl is a regular and rather common winter visitor from Manitoba to the mountains, and no doubt breeds in the secluded wooded districts, particularly northward. Sir John Richardson reported that "On the banks of the Saskatchewan it is so common that its voice is heard almost every night by the traveller wherever he selects his bivouac."

Saw-whet Owl: *Cryptoglaux acadica*.

Length: 7.5 to 8 inches.

Description: Upper parts brown more or less spotted with lighter colour. Lower parts white streaked with brown. Face-disc brown with some white about the rim. No ear tufts.



SCREECH OWL

Breeding habits: Nests in holes in trees. Eggs 3 to 6, white.

Season and range: A winter visitor or rare resident in Manitoba and westward.

The saw-whet owl is not common in Manitoba. Being entirely nocturnal and frequenting only wooded districts, it might be suspected of being more plentiful than generally supposed, were it not that its peculiar "saw-whet" call on winter nights betrays its presence wherever it occurs. It seems to be an irregular winter visitor in the wooded districts all across the plains, and may breed in some localities.

Screech Owl: *Otus asio*.

Length: 8 to 10 inches.

Description: Mottled brown, gray and black or a somewhat uniform rusty-red. The plumage too variable to be described. Face-disc bordered with black. Ear tufts conspicuous.

Breeding habits: Nest in hollow tree. Eggs 4 to 6, white.

Season and range: A rare summer resident or migrant in eastern Manitoba.

The peculiar colour variations through which this owl passes make it difficult, if not impossible, to describe its plumage. It passes from mottled gray to bright rust-red, and although these phases are very distinct there is found every possible degree of shading between. The changes come about, too, by change of the colour of the feathers not by moulting, and have no relation to age, sex, season, locality or even the individual. The same individual will be found in different colours at different times.

This owl, so well known farther east, is rather rare in Manitoba, and found mostly in the eastern part, but occasionally as far west as Brandon at least.

Great Horned Owl: *Bubo virginianus*.

Length: 19 to 23 inches.

Description: Feathers irregularly spotted and mottled, brown, yellowish and whitish, the plumage so variable that no single description answers all the phases. Face-disc not so pronounced as in some species, whitish bordered with black. A white bar across the upper breast. Ear tufts long, black and tawny.

Breeding habits: Nest in hollow trees, on branches, on cliffs or on the ground. Eggs mostly 2, white.

Season and range: A most universal species occurring in several colour variations in wooded areas across the continent. Non-migrating, or moving southward a little in cold winters or when food is scarce.

This is one of our largest, fiercest and most powerful owls. In strength and ferocity it surpasses either the great gray or the snowy, although the former exceeds it slightly in dimensions. Its size, general colour and long ear tufts serve to identify it in any of its different colours or markings. It is most frequently seen in winter, as scarcity of food then drives it at times from the seclusion of the woods, and it frequently invades hen-roosts or works havoc among the various kinds of grouse. Its usual food is rabbits and other small mammals, but anything is acceptable as prey when these fail.

It shares with the barred the title "hoot owl", the hoot and laugh of the two being quite similar.

This hardy bird breeds in very early spring or even winter; at least, while the snow is still on the ground fresh eggs may be found in the nest. It usually lays two eggs and they nearly always hatch male and female. Of the two the female is much the larger and fiercer, as is the case with almost all birds of prey.

It is doubtful if the true *Bubo virginianus* extends as far west as the plains, or at least west of Manitoba. A lighter coloured race, *Bubo virginianus subarcticus*, is supposed to be the prevailing type across the prairie; in some books this is divided into two sub-species and a smaller, very light, form called *Bubo virginianus arcticus* is recognized. The latest check list of the American Ornithologists' Union does not recognize *arcticus*. In all cases the differences are



Eastern

Western

Northern

GREAT HORNED OWL

slight and all gradations from one to the other seem to exist. Atkinson says "Geographical locations alone seem to distinguish this variety from plain *virginianus* and the lighter variety *arcticus*, as the three types merge so gradually into one another that the line of distinction cannot at times otherwise be drawn. Horned owls, whatever they ultimately prove to be, breed regularly and commonly

through all the wooded districts of Manitoba and west to Edmonton. Frequently very small and light-coloured birds are secured in either spring or fall, and possibly these will prove to be *arcticus*."

Snowy Owl: *Nyctea nyctea*.

Length: 20 to 24 inches.

Description: Varying from almost pure white to spotted and apparently barred with brown and black. No ear tufts.

Breeding habits: Nest on the ground. Eggs 3 to 10, white.

Range: A winter visitor breeding far northward.

This white spectre comes to us silently from the north about the first fall of snow. Its coming does not seem to depend on the snow, for frequently when that is delayed the birds appear first. It hunts in the daytime as well as at night and haunts the fields and marshes, usually lighting on some low perch such as a haystack or pile of straw. It does not seem to like civilization, however, and is always most plentiful in sparsely settled districts.

In their northern summer home these owls must be very numerous as they do not all migrate, and the number coming south across the continent each winter must be enormous. Their large size and white colour, as well as the habit of flying by day, may make them seem more plentiful than other owls, when in reality they are not.

The colouring of these owls is exceedingly variable, ranging from almost pure white to more blackish than white, the spots so arranged as to give a somewhat barred appearance, especially on the wings and tail. It is doubtful if any birds are absolutely without dark spots, although some have so few as to appear all white. The larger and darker specimens are the females, which in this case can lay no claim to be called either the "fair" or "gentle sex".

Their summer home is in the far north, in the barren lands and beyond, where they nest on the ground. The eggs are laid at intervals, and a nest may contain young birds and eggs in various stages of incubation. The number of eggs to a nest varies from three to ten. Coues says they *certainly* breed in the Canadian provinces, including Manitoba. Of this, however, there seems absolutely no authentic record. One fanciful account of a nest in Manitoba is given in "Bendire's Life Histories of N. A. Birds". The nest was said to be on the ground, built of hay and grass and raised eighteen inches above the prairie level, and incubation was well advanced in the middle of February. There seems to be no doubt that the man who recorded this find drew upon his imagination for his facts.

"It preys upon hares, spermophiles and smaller mammals—upon ptarmigan, ducks and smaller birds, and often proves itself as good a fisherman as it is a bold fowler."—Coues.

Hawk Owl: *Surnia ulula caparochi*.

Length: About 15 inches.

Description: Upper parts brown spotted with white, the spots small and round on the head, larger and longer on the back, with few or none across the neck. Under parts marked with transverse bars of brown and white from the breast backwards; a wide dark band across the breast; above that, including the face-disc, whitish; bill and eyes yellow; feet brownish-black.

Breeding habits: Nest in evergreen trees or in holes in old trunks. Eggs 3 to 7, white.

Season and range: A winter visitor, nesting from the North Saskatchewan northward.

The hawk owl gets its name because, not only in appearance but in habits, it resembles the hawks. It is en-

tirely diurnal in its habits, hunting by day as freely as a hawk, and often selecting a high exposed perch from which to watch for its prey. Its flight is swift but noiseless, a combination of that of the hawks and owls. The habit of screaming while on the wing also more resembles the hawks than other owls.

It is a common winter visitor in Manitoba and the other prairie provinces, but is not known to breed in the southern parts. In the spruce belt north of the prairie and north-



YOUNG BURROWING OWLS

ward as far as trees are found, it breeds freely, nesting either in the branches of green trees or in holes in decaying trunks.

Burrowing Owl: *Speotyto cunicularia hypogaea*.

Length: 9.5 inches.

Description: Upper parts grayish-brown, spotted with whitish; under parts dull white, the breast and belly marked with brown spots in transverse bars. Legs long and slim for an owl, the tarsus but slightly feathered in front and bare behind.

Breeding habits: Nest in a deserted badger or gopher hole about 6 feet from the surface. Eggs 5 to 10, white.

Season and range: A summer resident on the southern part of the prairie, but never plentiful.

This little bird is unmistakable as it does not closely resemble any of the other owls. It can easily be distinguished by its long, slender, almost naked legs and brown plumage, spotted or barred with darker brown.

It seems to be a somewhat recent arrival in Manitoba, and even yet it is not reported farther west than Moosejaw and Medicine Hat. "The first Manitoba record of this species was a pair taken six miles north of Portage la Prairie on June 2nd, 1897, and brought to me. One of these is still in my collection—I did not, however, note them west between Portage and Edmonton along the line of the G.T.P. Ry., I presume because our course lay too far north."—Atkinson.

In the summer of 1899 I found a pair occupying a deserted badger's hole near MacGregor. They now occur regularly through Manitoba and westward well across the prairie.

The specimen mentioned by Atkinson as the first in Manitoba is before me as I write.

ORDER COCYGES: CUCKOOS AND KINGFISHERS

Rather large birds with only two toes in front, or if three toes, two are joined for half their length.

This order is closely related in structure to the woodpeckers, this being most apparent in external structure in the feet.

Toes two in front and two behind, and separated for their whole length.

Family Cuculidæ: Cuckoos. Page 159.

Toes three in front and one behind, the outer and middle toes joined for half their length..

Family Alcedinidæ: Kingfishers. Page 160.

FAMILY CUCULIDÆ: CUCKOOS :

The cuckoos are birds of the woods. They are dull-coloured, with long tails and long flat wings which do not fold compactly against the sides of the body.

The toes are all separate and they cling with two toes on each side of the perch.

Black-billed Cuckoo: *Coccyzus erythrophthalmus.*

Length: 11 to 12 inches.

Description: Upper parts olive-gray or brown with a satiny lustre. Lower parts white. No large conspicuous white spots on the tail. Bill black.

Breeding habits: Nest a rough structure of sticks in a bush, not far from water. Eggs 4 to 8, pale green.

Season and range: A summer resident in wooded districts through Manitoba and Saskatchewan. Not plentiful.

*"While I am lying on the grass,
Thy twofold shout I hear,
From hill to hill it seems to pass,
At once far off, and near."*

WORDSWORTH

The cuckoo frequently mentioned in literature is the European bird, but the same retiring habit and plaintive note, which make the English bird seem to the poet but a "wandering voice", apply to the American bird as well. Very often, particularly in cold, cloudy weather, this "coo-coo" may be heard coming from the woods, but the bird is hard to see and even its distance away cannot be judged by its voice. Unlike the English bird, it is not parasitic but builds a nest of its own, although a rather poor one. It is a purely insectivorous bird, coming late and leaving early. Occasionally one catches a glimpse of it as it passes from one grove to another, but it never stays long in the open.

Besides the note to which it owes its name, this bird utters a clucking call which is very characteristic in tone but hard to describe. Sometimes this passes directly into the "coo-coo", but this blending of the two is not often heard. In fact there is little in the notes to suggest that they come from the same bird.

FAMILY ALCEDINIDÆ: KINGFISHERS

The kingfishers frequent the open spaces about lakes or rivers. They may be known by the prominent crest, the harsh voice and the long sharp bill. They have the two middle toes united for the greater part of their length.

Belted Kingfisher: *Ceryle alcyon*.

Length: 12 to 13 inches.



BELTED KINGFISHER

Description: Upper parts bluish-gray, some of the feathers obscurely tipped with white; primaries black with white markings; tail slightly tipped with white and variegated with black and white, the white only showing on the lower side where the ground colour loses its bluish tint. Under parts white with a bar across the breast the colour of the back. A white ring about the neck. Head large with a prominent crest, blue in the male and black in the female. Bill black, long and straight. Feet with the first three toes more or less fused for part of their length. In the female the bar across the breast is mixed with chestnut, and the whole of the lower parts, particularly the sides and lower breast, mostly chestnut.

Breeding habits: Nest mostly in burrows in the side of a bank, and may be 8 feet from the surface. Eggs 6 to 8, clear white.

Season and range: A summer resident around water across the plains.

The kingfisher is nowhere a plentiful bird. A pair or two may be found around any lake or stretch of river where the fishing is good, and no more occur for miles. The size of the bird, its habit of flying in the open over the water or perching in an exposed position, its sudden meteoric descents into the water after a fish, and above all its harsh grating note, mostly uttered while on wing, all go to make this bird unmistakable. When it catches a small fish it gobbles it while still on the wing, but it is not a sustained flyer. Most of its time is spent sitting on some dead limb projecting over the water and watching for a fish to appear.

Nothing can be more noisy or less musical than these birds, even about their nests. They seem to take no pains to conceal the whereabouts of the nest and often attract attention to it by their cries. This may be because they know it is safely hidden deep in the earth.

The kingfishers are all notorious for the filthy condition of their nests, and this one, although not quite as bad as some, is no exception. Both nest and young birds are in a disgusting condition of filth by the time the young are able to fly.

ORDER PICI: WOODPECKERS

Birds with strong straight bills, short stiff tail-feathers and toes especially fitted for climbing.

Toes two in front and one or two behind, none of the toes joined.

FAMILY PICIDÆ: WOODPECKERS

Hairy Woodpecker: *Dryobates villosus*.

Length: 9 to 11 inches.

Description: Back black with a white stripe down the middle.

Wings black, profusely spotted or barred with white. Tail with four central feathers black, the next pair black and white, and the outer pair entirely white. Head black with a white stripe over the eye, and another from the bill backwards and running down the neck. The male with a scarlet patch on the back of the head. Under parts white.

Breeding habits: Nest in holes excavated in decaying trees. Eggs about 5, clear white.

Season and range: A resident in wooded districts across the prairie.

The hairy woodpecker varies greatly in size according to latitude, getting larger going northward. The only difference between the Canadian bird and that found farther south is in size. Any specimen measuring more than ten inches in length may safely be classed as the sub-species, but it is not wonderful that some are found which approach more nearly the size of the southern bird. This is more true of specimens in Alberta than in Manitoba.

The bird frequents the deep woods in summer, excavating for itself a nest in the trunk of a partially decayed tree, and apparently often occupying the same hole for a num-

ber of years. Its food in summer consists of a variety of insects, but in winter it seems to live mostly on wood-borers. It wanders about in winter in search of food and may frequently be seen in company with the white-breasted nuthatch and the chickadee.

Downy Woodpecker: *Dryobates pubescens*.

Length: 6 to 7 inches long.

Description: Exactly like the preceding, except that the outer tail-feathers are barred black and white.

Breeding habits: Very similar to the last. >

Season and range: A common resident in wooded districts across the prairies.

The downy is almost an exact miniature of the hairy, but differs in its method of getting its food. The hairy bores into the wood of decayed trees, extracting the insects that tunnel through the dead and dying wood, while the downy seems to confine itself entirely to the bark. It often bores rows of holes through the outer bark seeking insects imbedded there, but it never injures the tree. In fact, the good it does must be considerable in ridding them of insect pests.

This little woodpecker, like the larger one, is most frequently seen in the winter when it often wanders in search of food.

Arctic Three-toed Woodpecker: *Picoides arcticus*.

Length: 9 to 10 inches.

Description: Upper parts glossy black with a greenish or bluish tinge particularly towards the head, and a few obscure white spots on the back; lower parts white; sides and under sides of the wings barred with black and white; a white line below each eye running back on the neck, the two meeting or almost meeting on the forehead; four middle tail-feathers black, the others white or barely

touched with black; many of the wing-feathers spotted with white; male with a square yellow patch on the crown; feet and bill black, or almost so; only one hind toe.

Breeding habits: Very similar to the other woodpeckers.

Season and range: A resident in the spruce woods across Canada.

The Arctic three-toed or black-backed woodpecker, although a common resident in conifer forests across Canada, is not as often seen as most of its race. It frequents the deep woods and only those who go there see it. In its solitary haunts it is easy of approach, and is very easily identified by its black back and white breast. In winter, when food is scarce in the forest, it may sometimes be seen in the trees along the streets in towns.

Three-toed Woodpecker: *Picoides americanus*.

Ladder-back Woodpecker.

Length: 8 to 9 inches.

Description: Closely resembling the preceding but smaller. It differs in having the black of the head often mixed with white, more black on the outer tail-feathers and the back imperfectly barred with black and white. Number of toes, and yellow crown-patch in the male similar to the preceding.

Breeding habits: As the preceding.

Season and range: A resident in the spruce forests, but rare, and its exact range not well determined.

Although very similar, this bird can be easily told from the Arctic three-toed by the white markings on the back. It is found in all the spruce forests across the continent, and shades into the Alaska in the foot-hills of the Rocky Mountains.

The Alaska three-toed woodpecker is a colour variation of this species, only differing by having the white bars of

the back broader and more or less running together. It is a northern and mountain bird ranging southward in the foothills of the Rocky Mountains, and has been found breeding at Banff and been collected near Calgary.

Yellow-bellied Sapsucker: *Sphyrapicus varius*.

Length: 8 to 9 inches.

Description: Upper parts variegated with black and white or yellowish-white; wings black with rather a large white patch on the wing-coverts and the primaries more or less spotted with white. Tail black marked with white, the markings largest toward the base of the centre feathers. Crown crimson bordered with black except towards the bill; a white stripe over the eye, passing back to the nape, and another from the bill backward fusing with the white of the breast; between these two white stripes a black stripe enclosing the eye. Throat crimson in the male and white in the female, this surrounded with black which spreads to a large black patch on the breast. Under parts yellowish or dull white, the yellow more marked in the male. Bill black. Feet greenish-gray. The young lack the definite markings about the head, which is mottled black and white with no crimson throat-patch.

Breeding habits: Nest in a hole in a tree like the other woodpeckers. Eggs 5, white.

Season and range: A common migrant, more rarely a summer resident across the prairies.

The sapsucker is one of the best known, as it is one of the best marked, of all our woodpeckers. Its large size, brilliant markings and its habit of coming into the streets and gardens during migration, all serve to make it well known. Its bad habit of boring into trees in the spring in order to drink the sap makes it very objectionable during spring migration. Last spring we had a cut-leaved birch of about two inches in diameter so completely girdled by this bird that it died.



YELLOW-BELLIED SAPSUCKER

A curious misnomer has arisen throughout Manitoba, and no doubt farther west, by which this sapsucker has become known as the *red-headed* woodpecker. If this should become general, the reputation of the real red-headed may suffer for the offences of the other.

In attempting to strike a balance between the good and harm done by any species, my sympathies are always with the bird. Unless, possibly, in the case of one that has increased enormously, as the crow has, we should hesitate before attempting to exterminate any bird; and those increasing species like the crow and the house sparrow will not be exterminated.

Northern Pileated Woodpecker: *Phlæotomus pileatus*.

Length: 14 to 19 inches.

Description: General colour dull black. The throat, a line behind the eye, a stripe from the nostrils back along the side of the head and turning down the side of the neck, the lining of the wings and a space at the base of the wing-quills all white, more or less tinged with yellow. Crest and cheek-patch bright red in the male; in the female no red cheek-patch and only the back of the crest red.

Breeding habits: Nest in holes high up in tall trees. Eggs 3 to 5, white.

Season and range: A resident through the wooded district north of the prairie and in the Rocky Mountains and foot-hills.

This is the largest and most beautiful of all our woodpeckers, and living as it does in the conifer forests, where bird life is never plentiful, it is a most striking bird when seen for the first time. It is all too likely to make such an appeal to the man with a gun that his desire to carry away a trophy will lead him thoughtlessly to kill a bird which is highly useful and never very plentiful. One seldom sees these birds except in pairs, and may go far from seeing

one pair before seeing another. This makes them all the more desirable as a trophy.

The value of the bird is in the protection it gives the trees against both wood and bark borers. Large areas of woodland are patrolled by a single pair and in the case of an attack of bark borers, such as has occurred in British Columbia, the value of the woodpeckers would be hard to estimate.

Like some other woodpeckers, birds from the northern part of the range are larger than those of more southern distribution, and it is an open question whether or not the winter birds are the same as those found in the same locality in the summer, or whether a certain amount of migration takes place.

These birds are now fully protected by law and it is illegal to kill them or have a dead bird in possession.

Red-headed Woodpecker: *Melanerpes erythrocephalus*.

Length: 8.5 to 9.5 inches.

Description: Head and neck deep rich red. Back, wings, except the secondaries, and tail black. Upper tail-coverts and secondaries pure white. Lower parts white tinged slightly with yellow or red. A beautiful tricolour of red, white and black in almost equal proportions, and most noticeable when the bird is in flight. In the young the head and neck are gray.

Breeding habits: Nest in a hole in a tree. Eggs 5 or 6, white.

Season and range: A rather rare summer resident, most plentiful in eastern Manitoba.

This highly coloured bird is unmistakable. In flight it seems almost evenly divided into three colours, red, white and black. It is not found in any large numbers in any of the prairie provinces, but occurs locally as far west as the mountains. In Manitoba it is a fairly common resident in the Red River Valley, but rare farther west. During a

residence of four years in Portage la Prairie, I never failed to find this bird nesting in the vicinity. It is unfortunate that the species seems to be decreasing in numbers.



RED-HEADED WOODPECKER

Lewis's Woodpecker: *Asyndesmus lewisi*.

Length: 10 to 11 inches.

Description: Adult male and female: Whole upper parts black with a bronze lustre, brightest on the back. Face crimson. A gray collar, which passes into the gray of the breast, this in turn changing farther back to bright rose delicately lined with gray. Bill black. Feet dark.

Young: Dull above with no red or gray collar, the lower parts mixed gray and black, mingled with reddish.

Breeding habits: Nest a hole in a tree. Eggs 6 to 8.

Season and range: A resident of the Rocky Mountains in Southern Alberta and extending eastward. Apparently rare and accidental in Saskatchewan, where it has been reported as far east as the Qu'Appelle Valley near Indian Head.

This is a striking but rather retiring bird. It has a direct flight resembling a crow instead of the usual undulating flight of the woodpecker, and has also the habit of catching insects in the air like a flycatcher.

The name is in honour of the Meriweather Lewis of the Lewis and Clark expedition, which crossed the continent to the Pacific coast in 1805.

Northern Flicker: *Colaptes auratus*.

Length: 12 to 13 inches.

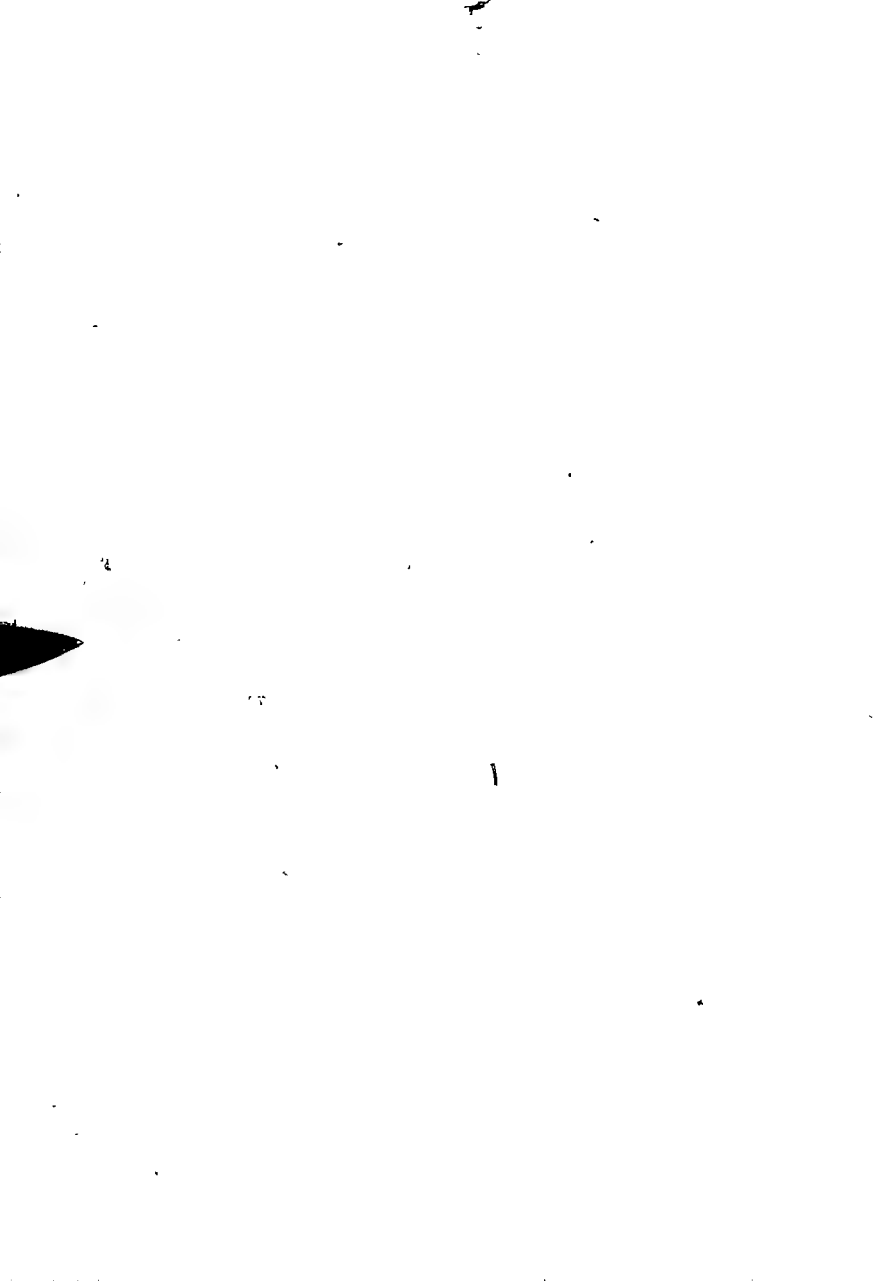
Description: Upper parts brown, barred with black. Rump and upper tail-coverts white. Tips of the wings dark, the feathers with yellow shafts and golden yellow on the under surface. Tail-feathers with dark tips, yellow shafts and yellow on the under surface. Top of the head gray, passing down the sides of the neck, with a scarlet patch on the back of the neck. Sides of the head, throat and upper breast purplish-brown, except for black cheek-patches in the male. A broad black v-shaped or crescent-shaped band across the breast. Under parts shading from buff to white, marked by circular black spots.



Downy Woodpecker.

Flicker.

WOODLAND ECHOES.



Breeding habits: Nest in holes in trees or posts, but sometimes in other holes. Eggs generally 6 or 7, white. By removing the eggs the bird may be induced to lay a very much larger number.

Season and range: A summer resident across the prairies, passing into the next species toward the mountains, but not wholly replaced by it.

The flicker is our best known woodpecker, and one of our most cheerful and sociable birds. He will drum on anything, from a tree to an iron water pipe, and is not at all averse to civilization. Why the A.O.W. list should make a distinction between our flicker and that of the East Atlantic states is hard to see. The eastern bird is classed as "*auratus*" while ours is a sub-species *C. auratus luteus*. According to Coues "this name designates northerly specimens of the common flicker, with those who wish to restrict the name *auratus* to S. Atlantic and Gulf Coast specimens." There seems to be no real difference in either markings or habits, and the distinction is not even mentioned by Ridgway.

This is a woodpecker which seems to be changing its habits. Although a true woodpecker in structure and with many habits peculiar to the race, yet in many ways it is different. It frequents open spaces much more than any other; will sometimes nest in any odd nook, and has a habit of alighting on the ground and perching crosswise on a limb, which most of the race seldom or never do. Its food, too, is gleaned largely from the ground, and it seems to have a peculiar liking for ants.

Shortage of trees has made this bird resort to other places to nest. It regularly bores into fence posts and telegraph or telephone poles, and has been known to nest inside buildings, or in odd crevices where no excavation was needed. If a wooden house stands vacant in an

isolated location, it is no uncommon thing to find holes bored in the side by the flicker. This, like walking on the ground and perching crosswise on a limb, is an indication that the bird is gradually departing from the usual woodpecker ways.

Red-shafted Flicker: *Colaptes cafer collaris*.

Length: 12 to 14 inches.

Description: Similar to the yellow-shafted, except that the shafts of the feathers are red instead of yellow, and the under surface of the feathers a sort of reddish-orange rather than golden yellow. This gives to the whole plumage a darker tone than that of the common flicker. No red patch on the back of the neck in either sex.

Breeding habits: Exactly like the preceding.

Season and range: A summer resident in the Rocky Mountains and foot-hills.

The red-shafted flicker is a bird of the Rocky Mountains, its range overlapping on that of the ordinary or yellow-shafted, and is found on the east side of the Canadian Rockies, at least at Banff. It needs no special description as it is identical with the common flicker, except that the yellow is replaced by red, most notably in the quill or shaft of the feathers. It is correspondingly darker in general colour and has no red patch on the head in either sex.

There has been a dispute over the naming of this species. Even in the latest edition of his "Key", published shortly before his death, Coues absolutely refused to admit the specific name "*Cafer*". He claimed it was first given owing to confusing the bird with a South African species. He says, "Individually, I cannot incur the penalty of deliberately using for a North American bird a name only applicable to one from South Africa. The fact that "*Cafer*" is a sort of Latin for Caffraria or Caffrarian makes its use

in this connection as bad as "Hottentot Woodpecker" or "Zulu Flicker" would be; and how would such a combination sound in plain English?" He gave the bird the specific name "*Mexicanus*".

The Hybrid Flicker.

On the plains of the Western States and extending into Canada, in that region where the ranges of the yellow-shafted and red-shafted races overlap, is found a race showing the markings of both in all grades of mixtures. This puzzled Audubon when he discovered it in 1843, and has puzzled many since. Coues explains it as "a simple case of hybridization on a grand scale", and this explanation is now pretty generally accepted. For the sake of convenience this race is admitted in Coues' "Key" as a distinct species under the specific name "*Ayresii*", which was given it by Audubon. Ridgway, however, does not admit it as a species in his "Manual", and it is not included in the A.O.U. list.

ORDER MACROCHIRES: GOATSUCKERS, SWIFTS AND HUMMINGBIRDS

This is another order in which the birds are classed together because no one knows what else to do with them. About the only way in which they resemble one another is in their habit of feeding while on wing, but many other birds feed in the same manner.

Bill small and weak, the gape extending far beyond the bill so that the mouth opens very wide. Dull-coloured birds, mostly nocturnal.

Family Caprimulgidæ: Goatsuckers. Page 176.

Swallow-like birds with the quills of the tail feathers projecting as spines.

Family Micropodidæ: Swifts. Page 180.

Very small birds with insect-like flight and extremely long bills.

Family Trochilidæ: Hummingbirds. Page 183.

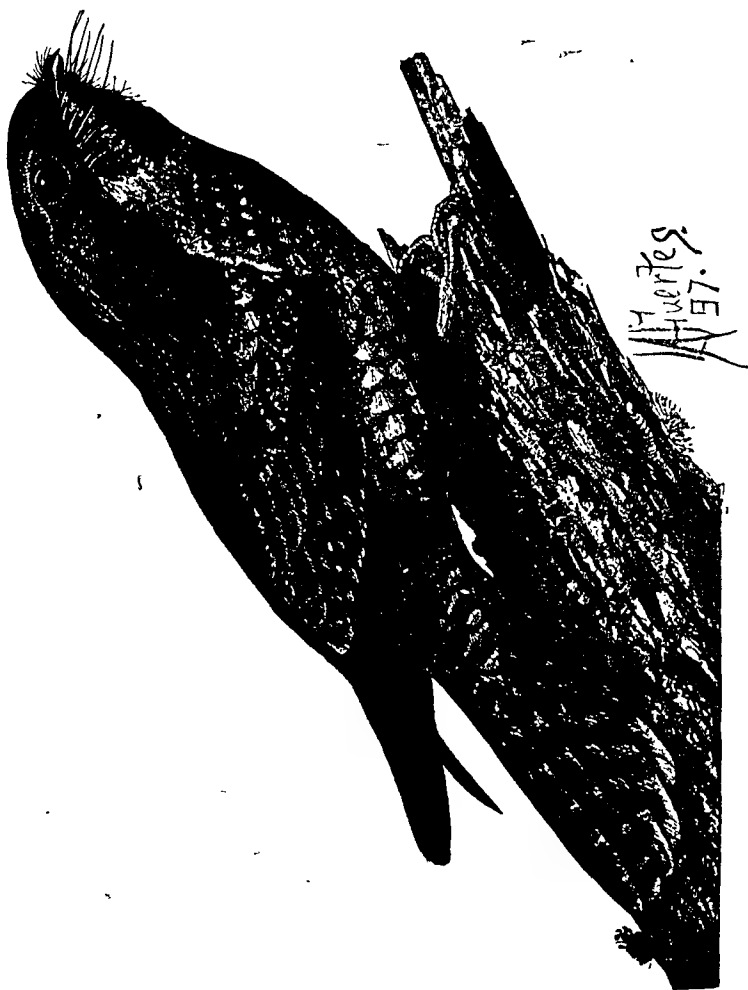
FAMILY CAPRIMULGIDÆ: GOATSUCKERS

Plain-coloured mottled birds with soft plumage and very long, tapering wings. They are nocturnal in habits, or nearly so, and feed on insects which they catch on wing. The bill is small and weak, and the mouth opens far back making the gape, or opening of the mouth, very large.

Whip-poor-will: *Antrostomus vociferus*.

Length: 9 to 10 inches.

Description: The whole upper parts mottled and variegated in black, white and yellowish, giving a general effect of gray or brown. Tail marked in gray and black. Under parts



WHIP-POOR-WILL

quite dark, almost black, but more gray on the breast. Band across the throat, white in the male and yellowish in the female. The general tone of the female is more brown than gray.

Breeding habits: No nest. Eggs 2, on the ground or leaves, creamy-white.

Season and range: A summer resident in wooded districts in Manitoba but not extending much farther west.

The whip-poor-will, like the cuckoo, is best known by its voice. It is one of the best examples of protective mimicry in all nature, and might be plentiful yet seldom seen. So closely does it resemble the ground or the branch on which it sits lengthwise, that one might pass and not see it. The eggs, too, are a perfect mimic of the ground on which they lie, and even when you know where they are, if you turn away it requires some effort to locate them again. Then, too, it is almost entirely nocturnal and so does not show itself by day. Altogether, if the bird were silent, there might be many in a locality without being seen.

But its voice betrays it. Once the night falls it begins, and there is no longer a doubt of its presence. This bird is locally common in Manitoba, particularly in the wooded regions of the north and east. One night last June I heard the woods become vocal with their weird calls in the forest reserve east of Brandon.

The Poor Will, *Phalaenoptilus nuttalli*, is a smaller bird, strongly tinged with brown in all but pure breeding plumage. Its note is the same as the Whip-poor-will with the first syllable omitted. It is a more southern bird of the great plain region, but is occasionally found in southwestern Saskatchewan or southern Alberta.

Nighthawk: *Chordeiles virginianus*.

Length: About 9 inches.

Description: Upper parts mottled black, brown, gray and yel-



NIGHTHAWK

lowish, on the whole the black prevailing. Lower parts barred with black and white. A bar across the throat, white on the male and yellowish in the female. A large white spot on the five outer wing-feathers.

Breeding habits: No nest. Eggs 2, on the bare ground or rock, mottled with gray and other dull colours.

Season and range: A common summer resident across the prairie.

The nighthawk is a familiar bird, as it flies to some extent in daylight and is very much in evidence just at twilight. When resting in the daytime it is more likely to be found on the ground than perching on a tree. When it does alight on a branch or fence-rail, it sits lengthwise like the whip-poor-will. It can always be easily distinguished from the latter by the large white spots on the wings. These are visible for a considerable distance when the bird is in flight.

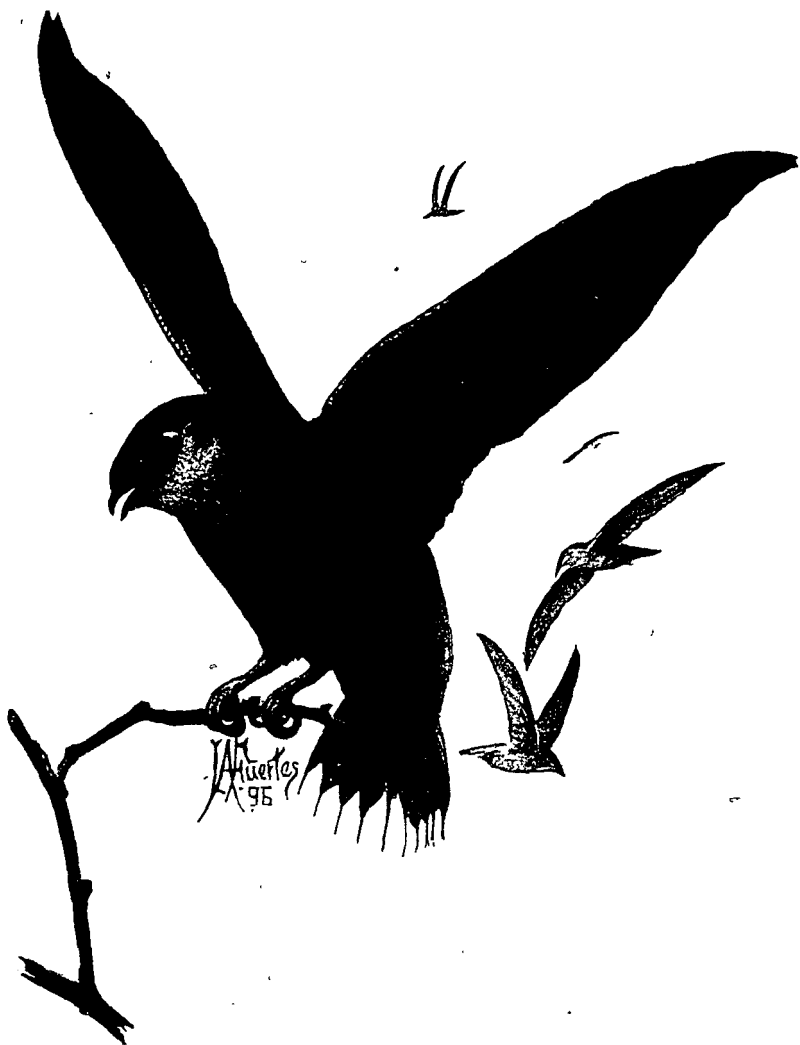
It feeds on insects, largely mosquitoes, which it catches while on wing. This accounts for the intricate, seemingly aimless flight of the bird. Its shrill, harsh cry and a peculiar booming or buzzing sound; which it makes by suddenly plunging or falling through the air from a considerable height, are both familiar. People are not yet agreed just how that loud buzz is made, but we have all often seen the bird while making it.

A peculiar case of adaptation is the habit this bird has acquired of using the gravelled roofs of high, flat-topped city blocks for nesting places. It is time it started a "back to the land" movement, or it will become exclusively a city dweller.

FAMILY MICROPODIDÆ: SWIFTS

Swallow-like birds with the tail-feathers terminating in sharp spines. They nest in hollow trees or chimneys, sticking the nests against the sides.

GOATSUCKERS, SWIFTS AND HUMMINGBIRDS



CHIMNEY SWIFT

Chimney Swift: Chaetura pelagica.

Length: Between 5 and 6 inches.

Description: Whole plumage a dull black, lighter beneath. Wings very long. The tail-feathers ending in sharp spiny points. Feet small and weak.

Breeding habits: Nest of twigs glued on the inside of a chimney or hollow tree. Eggs 4 or 5, white.

Season and range: A summer resident across the prairie, not plentiful in Manitoba and rather rare farther west.

Like the nighthawk, the swift has changed its nesting habits since the settlement of this continent. It formerly nested in hollow trees or caves, and to some extent must still do so, as chimney swifts may often be seen in pairs far from any hospitable chimney. The majority, however, now build in chimneys, and they glue the twigs of which the nest is made to the bricks by a secretion of the salivary glands.

Almost the whole life of this bird is spent on the wing. Its feet are too weak for walking, but enable it to cling to a vertical surface or to carry the small twigs of which its nest is made. These twigs are gathered on the wing, being broken off by the feet while the bird poises itself in the air.

While more than a single pair seldom nest in the same chimney, when the breeding season is over the birds collect in flocks and spend the night together in any chimney big enough to hold them. They are not plentiful enough on the prairie to gather in any very large flocks, but isolated pairs may be found nesting in chimneys in any town, and sometimes a pair is found, apparently nesting, where there is no chimney.

GOATSUCKERS, SWIFTS AND HUMMINGBIRDS

FAMILY TROCHILIDÆ: HUMMINGBIRDS.

Very small birds that make a humming noise by the rapidity with which their wings move. Their tongues are modified for extracting honey from flowers, which they do while poised on the wing.

These birds, in their small size and manner of flight, resemble some insects, particularly the hawk moths.

Ruby-throated Hummingbird: *Archilcchus colubris*.

Length: A little more than 3 inches.

Description: Green above and gray below. The male with a forked tail and a gorgeous ruby-red throat with a metallic lustre. The female with white throat and a rounded tail slightly shorter in the centre.

Breeding habits: Nest of moss or lichens, lined with down and glued to a limb. Eggs 2, white.

Season and range: A common summer resident in Manitoba, decreasing in numbers westward.

Everyone knows the ruby-throat. It is the smallest, the most airy and the most beautiful of all our birds. Darting from flower to flower, poising a moment on wings that move so rapidly that they cannot be seen, with the light of the sun giving a metallic glint to the green and red of its back and throat, one can hardly tell which is sunbeam and which is bird. It is one of the most wonderful things in nature, how so small a body can release such energy, and how such energy can be generated from the amount and nature of its food. Very tiny insects which the bird can collect with its delicate bill, and the nectar from the flowers,—these are the raw materials out of which it produces, not only the energy to keep it on the wing for hours, and moving at a

rate the eye cannot follow, but the gorgeous colours of its plumage as well.

The hummingbirds are essentially birds of the south. They seem the embodiment of sunshine. Yet the ruby-throat, according to Sir John Richardson, goes north to latitude 57° and may go even farther. It seems to carry the spirit of the south into the northland. While quite common in Manitoba, its numbers decrease going westward across the plains. In Brandon we have it regularly about the flower-beds all summer; and sometimes towards the end of the season, the females and young appear in considerable numbers, but I have never been able to find a nest.

ORDER PASSERES: PERCHING BIRDS

A very large order of birds with feet so constructed as to be perfect organs for grasping a perch.

The toes are never united by webs, and in most cases are cleft right to the base like the fingers of the human hand. The hind toe bends towards the others like a thumb, the whole forming a foot particularly suited for clasping. This order includes by far the greater number of our best known birds.

KEY TO FAMILIES

Tarsus cylindrical or nearly so.

Birds without power of song.

Family Tyrannidæ: Flycatchers. Page 187.

Tarsus flattened, particularly behind.

Song birds.

Small, dull-coloured ground birds with two projecting tufts of feathers on the head.

Family Alaudidæ: Larks. Page 198.

Rather large birds with strong straight bills without either a notch or tooth on the upper mandible or bristles at the angle of the gape. Bills with strong bristles at the base which point forward.

Family Corvidæ: Ravens, Crows, Jays and Magpies. Page 200.

Bills without bristles at the base and the naked horny ridge extending well up into the feathers of the forehead.

Family Icteridæ: Blackbirds, Orioles and Meadow-larks. Page 208.



PRAIRIE BIRDS

Mostly small birds with stout conical bills which have bristles at the gape.

Family Fringillidæ: Sparrows, Buntings, Finches, Grosbeaks, Crossbills, Longspurs and Towhees. Page 219.

Bill stout, decidedly longer than it is deep, with the upper mandible slightly curved and with a tooth on each side of the upper mandible, near the middle.

Family Tanagridæ: Tanagers. Page 255.


Bill weak, very short and broad with a wide gape. Insect-eating birds with long wings and forked tails that feed on wing.

Family Hirundinidæ: Swallows. Page 256.

Bill more or less toothed or notched on each side of the upper mandible, and hooked at the tip. Rather large birds, strongly marked with black, bill strongly hooked at the tip and a distinct tooth at the base of the hook.

Family Laniidæ: Shrikes. Page 266.

Brownish-coloured crested birds, the bill broader than it is deep, slightly hooked at the tip and a very slight tooth just back of the hook.

 Family Bombycillidæ: Waxwings. Page 263.

Small dull-coloured birds of the tree tops, the bill slightly toothed and hooked at the tip.

Family Vireonidæ: Vireos. Page 270.

Bill straight, much longer than deep, and neither toothed nor hooked. Small insect-eating birds frequenting trees and shrubberies, often with bright-coloured markings.

Family Mnioiltidæ: Wood Warblers. Page 273.

Rather large brown or slate-coloured birds with long tails.

Family Mimidæ: Thrashers and Catbirds. Page 300.
Small brown birds with long tails.

Family Troglodytidæ: Wrens. Page 303.
Small woodpecker-like birds that perch on the trunks of trees, often going head downward.

Family Certhiidæ: Creepers. Page 309.

Family Sittidæ: Nuthatches. Page 311.
Small, sprightly winter birds that feed among the tree tops, often hanging on the under side of the branch.

Family Paridæ: Chickadees. Page 314.

Very small dull-coloured birds of the tree tops with white wing bars.

Family Sylviidæ: Kinglets. Page 317.

Somewhat large birds of the ground or low perches, either brown with speckled breasts; or blue on the back; or gray with black head and reddish-orange breast.

Family Turdidæ: Thrushes, Bluebirds and Robins.
Page 319.

SUBORDER CLAMATORES: SONGLESS PERCHING BIRDS

Perching birds with ten primaries, and less perfectly developed vocal organs than others of the order.

This suborder is represented by a single well known family, the flycatchers.

FAMILY TYRANNIDÆ: TYRANT FLYCATCHERS
Rather noisy, aggressive birds with harsh voices. They watch for insects from an exposed perch and catch them on the wing.

This is a very large family belonging exclusively to America. There are about four hundred species and sub-



KINGBIRD

species, but they are mostly more southern in their distribution.

Kingbird: *Tyrannus tyrannus*.

Length: About 8 inches.

Description: Upper parts blackish-gray growing black on the head; wing-feathers edged with white; crown with a yellowish-red patch. Lower parts pure white or tinged with gray. A white band across the tip of the tail. Bill and feet black.

Breeding habits: Nest a bulky structure of sticks, grass and pieces of string, in low trees. Eggs 3 to 5, cream or white scrawled or spotted with brown.

Season and range: A common summer resident across the prairies.

The kingbird is so well known that it serves as a good type of all the flycatchers. There are differences, and in some cases great differences, but any member of the flycatcher family can be recognized by one who knows the kingbird. It may be found sitting on some exposed perch and making frequent flights after insects which it catches on the wing. The click of its bill when it makes a catch can be heard for some distance.

This bird's reputation for pugnacity is not altogether deserved. It will attack any crow or hawk that appears above the sky line, but I have never seen it bother small birds. Fearless it certainly is, and will attack any bird that is known to be an egg thief, but peaceable birds like the wrens and robins may nest close to it and be unmolested.

One effect of the wilderness on man is to make him exaggerate its ills and overlook its benefits. When America was settled almost every bird and beast was credited with evil habits or suspected of evil intent. Some ate the grain and others the fruit. The kingbird did neither, but no bird with his audacity could be harmless. When he made those flights into the air and brought his jaws together with a resounding click, he could be after nothing good. He must be catching the bees. Consequently he was given a reputation for destroying bees and called the "bee martin". The accusation was so absurd that neither the name nor the reputation has ever extended beyond the eastern coast States where they originated, but the incident shows how anxious people seem to be to fasten some bad habit upon the most harmless bird.

Arkansas Kingbird: *Tyrannus verticalis*.

Length: 9 inches.

Description: Back olive-gray, losing the olive tint on the head. Crown patch red. Wings brown edged with whitish. Throat and breast whitish. Belly and under wing and tail-coverts clear yellow. Outer web of the outer tail-feathers all white, but no white band on the end of the tail.

Breeding habits: Nest rather more bulky and less firmly built than that of the kingbird but otherwise resembling it, and in similar locations. Eggs not to be distinguished from those of the kingbird.

Season and range: A summer resident in southern Alberta and Saskatchewan, and more recently in southern Manitoba.



ARKANSAS KINGBIRD

The Arkansas kingbird, like the barn swallow and the magpie, is a comparatively recent addition to our bird population. I first heard of it in 1910 when a teacher from near Lyleton, in the extreme south-western part of the province, told me of the strange kingbird that had come into that vicinity. At first I thought he had run across the crested flycatcher, which nests in the woods along our rivers, but his description showed that it could be no other than the Arkansas.

The next summer, June, 1911, I covered the whole province with a special train sent out by the Agricultural College, and found

this bird nesting in Pierson, and saw it at Waskada, Hartney and Virden. That same summer a pair visited the Normal School grounds in Brandon, which were then being planned in preparation for the erection of the school.

Since that time reports have steadily increased in numbers and reliability, until now it breeds commonly in almost all the towns and villages as well as other places; but it appears to have a preference for a location near the habitation of man. For several years a number of pairs have nested in the trees on the city streets in Brandon, but so far none have built in the trees surrounding the school. I have found it breeding as far north as the south end of Lake Manitoba, and it may be considered a well established summer resident through the whole southern part of the province. Mr. Laing reports it nesting in the province in 1907. This extension of range establishes the bird across the whole width of the prairies, as it has been a well known breeding species in southern Alberta and Saskatchewan since the earliest settlement.

It is a bird of striking appearance, especially in flight when the yellow markings show, and has a reputation of being rather quarrelsome about the nest. Otherwise it is much less noisy than the ordinary kingbird. Its olive back and yellow under parts, and the lack of a white band on the tail, will distinguish it at once from any other species.

Crested Flycatcher: *Myiarchus crinitus*.

Length: 8 to 9 inches.

Description: Upper parts olive-gray or brownish. Some of the wing-feathers edged with white or chestnut. Tail longer and more rounded than that of the kingbird, all the feathers but the inner pair chestnut on one side. Throat and front breast gray. Lower parts yellow. Head with a decided crest.

Breeding habits: Nest in holes in trees or other odd nooks, often often bulky and in some places with the cast-off skin of a snake worked into the lining. Eggs 4 to 8, cream or buff and curiously marked with reddish or brown.

Season and range: A somewhat rare summer resident in southern Manitoba, and apparently accidental farther west.

The crested flycatcher is a bird to attract attention wherever it is found, and not easily confused with any other. While easily detected as belonging to the flycatcher tribe, it is not at all likely to be taken for any other member of it. It has become a somewhat common bird in southern Manitoba, nesting in the woods along the rivers and north to Lake Winnipegosis, but does not extend its range much beyond the province.

Burroughs and others refer to this bird as noisy and pugnacious, a sort of bully among birds. Its size and the family to which it belongs would both fit it to play this part, but I have never seen that side of its character. Whether or not it adheres to its custom of lining its nest with a snake skin I do not know, but one nest reported from Saskatchewan had a snake skin in it.

Phœbe: *Sayornis phœbe*.

Length: About 7 inches.

Description: Upper parts olive-brown, some of the tail-feathers whitish on the outer edges. Beneath dull or yellowish-white. Bill and feet black. Head with a small crest.

Breeding habits: Nest of moss or other material, rather bulky and placed on the top of a timber, in a shed or under a bridge; in the woods on a rock or in a crevice in a bank and generally near water. Eggs 3 to 8, pure white or slightly spotted.

Season and range: A rare summer resident in the prairie provinces.

The phœbe is one of the birds that changed its nesting habits with the settling of the country. Formerly it stuck

its nest against the side of a rock or in a crevice over a running stream. Now it houses itself securely in any building that is open, and has a preference for building on a flat horizontal surface. Although plentiful in the east,



PHOEBE

where no shed or bridge is complete without a pair of phoebes, it is a rare bird with us.

It has been frequently but irregularly reported from many parts of the Canadian prairie provinces. The range extends as far west as Edmonton and north to the Lesser

Slave River region. In June, 1917, I found a pair of this species apparently nesting under the bridge across Crescent Lake at Portage la Prairie. The nest was not found owing to inability to reach the location, it being over the water.

It is more than likely that in some of the reports Say's phoebe, or the wood pewee, may have been mistaken for the phoebe; but there seems no doubt that in those cases where nests were found under a bridge or in a shed, as Spreadborough found them at Edmonton, the identification was correct.

Say's Phoebe: *Sayornis sayus*.

Length: About 7.5 inches.

Description: Upper parts grayish-brown, somewhat darker towards the head. Tail black. Lower parts cinnamon-brown paler on the throat and breast. Wings with some whitish markings and lined with whitish.

Breeding habits: Nest originally on rocks but now mostly in buildings. The nest is made of grass, down and feathers, and placed on a rafter or some such location. Eggs 4 or 5, white, or may be pink before being blown and white afterwards.

Season and range: A summer resident through Alberta and western and central Saskatchewan.

Say's may be distinguished from the common phoebe by its black tail and brown under parts, otherwise the two species are quite similar and are no doubt often confused. It occurs at least from Indian Head westward, and builds in and around buildings much as the common phoebe does in the east. It has not entirely abandoned its original nesting habits, however, and may be found nesting on rocks and ledges on the sides of cliffs, along the river valleys of the Rocky Mountains and the foot-hills.

Olive-sided Flycatcher: *Nuttallornis borealis*.

Length: About 7.5 inches.

Description: Upper parts including the tail, dark brown, growing darker on the head; some white on the tips of the wings. Throat and the middle line of the breast and belly, a streaky yellowish-white. Sides olive-brown, streaky and mixed with whitish, with large fluffy tufts of white on the flanks.

Breeding habits: Nest a crude structure of grass and twigs placed high upon a horizontal bough of a tree, generally an evergreen. Eggs 2 to 4, creamy-white spotted with brown.

Season and range: A rare summer resident in Manitoba, more common northward and westward.

The olive-sided flycatcher is another of our rare birds. It is a bird of the thick woods, however, and may be more plentiful than reports would indicate. It is found in suitable localities across the plains and seems to be somewhat more plentiful toward the Rocky Mountains. Its occurrence seems to be always irregular.

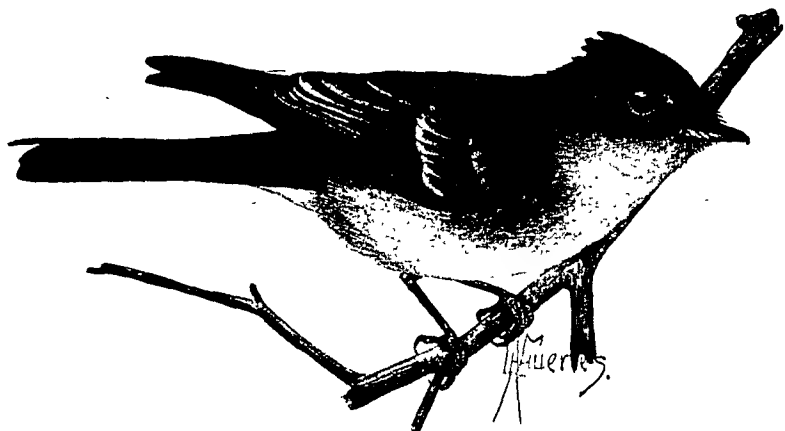
Wood Pewee: *Myiochanes virens*.

Length: 6 to 6.5 inches.

Description: Upper parts dark olive-brown, growing darker towards the head. Throat and breast paler. Belly yellowish, growing paler farther back. Two whitish wing-bars and a whitish ring about the eye. Feet and bill black.

Breeding habits: Nest of grass, bark or fibres, covered with moss or lichens, and placed on a horizontal branch, closely resembling a knot and hard to distinguish. Eggs generally 3, creamy-white spotted with brown toward the larger end.

Season and range: A summer resident in thick woods in southeastern Manitoba, reported as far north and west as Fort Ellice.



WOOD PEWEE

This is the least noisy of the race of flycatchers. It is shy and retiring, with a plaintive note and unassertive manners. It is found sparingly in the deep woods through Manitoba, particularly along the Red and Assiniboine rivers, but does not seem to go farther west.

Its note is low and plaintive, almost approaching a song, and that, with its retiring habits, makes it a bird little likely to impress itself on any but the most observant.

Least Flycatcher: *Empidonax minimus*.

Length: 5 to 5.5 inches.

Description: Upper parts olive-gray, darker on the head and paler on the wings. Wing-bars and a ring around the eye white. Breast whitish with just a tinge of yellowish toward the tail. Bill and feet black.

Breeding habits: Nest of grass, weeds and fibres, well constructed and forming a deep cup placed well up in the fork of a tree. Eggs generally 4, white or rarely marked with brown.

Season and range: A summer resident across the whole prairie region, very common in Manitoba.

This is the smallest of the flycatchers, and, if possible, the most persistent. In places, too, it is the most plentiful. Wherever a stretch of woodland is found, there, all through the summer day, his *che-bec, che-bec* may be heard. For several seasons I have spent two summer months in the society of this restless bird and have heard at the first streak of dawn the same *che-bec* which he kept up all day long. As a soloist he is not to be recommended.

His nest is bedded firmly in an upright crotch of a tree, generally twenty feet or more from the ground, and is exceedingly compact and well made. These flycatchers are good housekeepers, but the young have a disturbing habit of flinging themselves from the nest whether they can fly or not, if one starts to climb the tree.

ADDITIONAL RARER SPECIES

Western Wood Pewee: *Myiochanes richardsoni*.

From the Rocky Mountains eastward to Manitoba. Resembling the wood pewee but with a more abrupt note. The two species are much confused when their ranges overlap.

Yellow-bellied Flycatcher: *Empidonax flaviventris*.

A small unobtrusive bird little known in Manitoba and not extending westward. Mostly a migrant nesting to the north but occasional records in the southern parts of the province.

Traill's Flycatcher: *Empidonax traillii*.

This species occurs in two forms from the mountains eastward. It is a retiring bird frequenting moist thickets.

Wright's Flycatcher: *Empidonax wrighti*.

A mountain species, plentiful in the foot-hills of the Rocky Mountains, and found also in the Cypress Hills.

SUBORDER OSCINES: SONG BIRDS

FAMILY ALAUDIDÆ: LARKS

A rather small family of ground birds marked chiefly by the structure of their feet which are well adapted for walking. Their manner of flight and their habit of singing on wing, while not confined to this group, are characteristic of it.

Horned Lark: *Otocoris alpestris*.

Length: 6.75 to 7.5 inches.

Description: Back gray. Back of the neck, top of head, some of the wing-coverts and the tail-coverts pinkish-brown. Tail-feathers, except the middle pair, black; the outer ones edged with whitish. Sides and lower breast mottled with the gray of the back. A larger conspicuous black patch on the breast. A black bar across the front of the head and turned backward along each side, terminating in two tufts or "horns". Another black bar from the bill backward below the eye and curving downward. The sides of the head and whole throat yellowish-white. Under parts, behind the breast, white.

Breeding habits: Nest of a few pieces of grass in a deep depression in the ground. Eggs 3 to 5, gray, variously marked and resembling in colour the material of the nest.

Season and range: The first migratory bird to return in spring. Generally returns about February 25th, and some may remain all winter. Very common across the prairie but shading into several forms.

The horned lark is a well-connected bird, being first cousin to the celebrated European skylark. It has the same habit of soaring while it sings and singing as it soars which characterizes the skylark, but its song is not so impressive nor its flight as high as that of the European bird. When the song sparrow, oriole, rose-breasted grosbeak and warbling vireo are here we do not notice the song of the lark. But in March, when we have heard nothing but

the Billingsgate of the house sparrow all winter, the modest liquid note of the lark is as refreshing as the sound of a running brook after a prairie winter. Every day, even in a mild snowstorm, the little song can be heard coming from some low perch or a spot of ground left bare by the receding snow. A little later, when the birds begin to soar, especially when a number are together, the musical part of the performance is at least quite creditable.

The name "horned lark" includes a large number of separate forms which differ from each other very slightly. The bird regarded as the type is the eastern "shore lark", and the form most like it is our prairie horned lark. The only difference is that our bird is paler than the shore lark. The latter has a pink or violet shade suffused over its whole upper parts and intensified on the neck, shoulders and lower part of the back, while our bird is plain gray or only slightly tinged on the back and paler on the other parts. Whether the real shore lark extends as far west as Manitoba can hardly be considered settled, but the two forms seem to shade into each other about the region of the Great Lakes. Our form again shades into a still lighter form, the "desert horned lark", toward the west, but several other forms are represented on the prairie.

Just where the ranges of the desert and the prairie larks meet would be hard to say, but the southern Alberta birds are mostly of the pale type, those in Manitoba the darker race, the transition taking place across the prairies of southern Saskatchewan. Some of the light-coloured western birds belong to a still lighter form, the pallid horned lark.

There are also some more northern forms that pass through the settled areas on the prairies and nest farther north. They are much later in migration than our nesting forms and sometimes are quite numerous for a week or more in the late spring.

FAMILY CORVIDÆ: CROWS, JAYS, MAGPIES AND
BLACKBIRDS

Large birds with harsh voices, the bristles about the base of the bill pointing forward.

SUBFAMILY GARRULINÆ: MAGPIES AND JAYS

American Magpie: *Pica pica hudsonia*.

Length: 15 to 20 inches.

Description: Head, breast and upper parts iridescent black with a white patch at the base of the wing, the inner webs of some of the primaries white, and some white on the breast. Under parts white.

Breeding habits: Nest a bulky structure of sticks covered all over, with a hole in the side for entrance, lined with clay and an inside lining of fine twigs and rootlets. Eggs 6 to 10, pale drab blotched with purplish and brown so as sometimes to obscure the ground colour.

Season and range: A resident belonging to the Rocky Mountains but now extending across the prairie. It nests commonly in Manitoba.



MAGPIE

From the earliest settlement the magpie has occasionally spread across the prairie in the winter. Its original home was in the semi-arid region of the Rocky Mountains and extending northward into British Columbia, but in times of food scarcity it ranged far. The oldest settlers have told of seeing one from time to time.

About 1910, there was an invasion on a larger scale than usual. The bird was reported from very many points across the prairie, and a large number of specimens found their way to the shops of the taxidermists. Since then it has

been a constant visitor and developed into an established resident, although the majority of those wintering in Manitoba are probably migrants.

The first nest reported to me was in the valley of one of the Antler Creeks in 1920, but since then reports have come from many places, until it may now be considered as well established. I have seen it north as far as the north end of Lake Manitoba, but it has not extended its range much east of that point.

Those who did not know the magpie welcomed his arrival. He wears his dress clothes upon all occasions, and, after all, clothes count. Others, who knew his European kindred, were doubtful, and developments have shown that his conduct is quite as bad as his reputation.

It has always been admitted that the bird is a thief, but a more serious charge against him is that he will injure or kill live stock. It has often been noted that the bird likes to accompany cattle and sheep, often alighting on the back of an animal. This seemed to be to pick off flies. It now appears that if there is any small sore on the animal's back, the bird will gradually enlarge it, by picking at the raw flesh until the wound may prove fatal. It does this, too, without the animal objecting.

Blue Jay: *Cyanocitta cristata*.

Length: 11 to 12 inches.

Description: Upper parts bright blue with black bars on wings and tail. Outer tail-feathers tipped with white and some white on the wings. Collar black. Lower parts grayish-white. Head with a prominent crest. Bill and feet black.

Breeding habits: Nest a loose structure of twigs lined with fine material placed in a bush. Eggs 5 or 6, gray with brown spots.

Season and range: A resident in wooded districts across the prairie.



BLUE JAY

The blue jay is not a popular bird. Some wonder why nature wasted so many good qualities in his making. He has colour, energy, ability and, it is even claimed, a sense^o

of humour,—superior to most birds; yet he is disliked by both man and bird. He is a thief who robs other birds openly and shamelessly; in fact, he has no sense of decency whatever. Coues says, "He probably destroys more nests, eggs and young of other birds than any shrike or hawk." Such is this jay's reputation, and it would take much fine colouring and many knowing ways to offset it.

Black-headed Jay: *Cyanocitta stelleri*.

Steller's Jay.

Length: About 12 inches.

Description: Head and neck dull black which extends down the back and shades into a dark blue. Wings and tail a rather brighter blue but mixed with black. Crest prominent, the feathers separating. Bill and feet black. Sexes alike and young more dusky.

Breeding habits: Nest in low trees or bushes, a bulky structure but carefully concealed. Eggs 4 or 5, bluish green spotted with darker colours.

Season and range: A mountain species extending its range eastward into Saskatchewan. A specimen taken at Indian Head.

I have never seen this bird on the prairie but have seen it in British Columbia, where it was noticeable on account of an exceedingly harsh voice, which it used with great vigour.

Canada Jay: *Perisoreus canadensis*.

Whiskey Jack.

Length: 11 to 12 inches.

Description: Back, wings and tail gray, the wings and tail darker than the back. Crown dark. A light gray or white collar. Forehead white. Under parts light gray to whitish.

Young birds have the white markings replaced by a sooty-gray, giving the whole bird a dark smoky-gray appearance. This colour gradually becomes paler as the bird gets older until the normal adult plumage is reached.

Breeding habits: Nest large, of twigs, grass and moss lined with down, usually on a low bough of a conifer. Eggs 3 or 4, yellowish-gray to pale green, spotted with brown or gray, particularly about the larger end, variable.

Season and range: A resident from the northern limit of trees south to the northern States.

To those who have camped among the northern spruces, the whiskey jack is well known. As soon as the fire has been lighted and the bacon begins to frizzle, his peculiar whistle may be heard. The call is unmistakable, a single note, soft but penetrating. Modesty is not one of his virtues, nor is shyness his weakness. Anything eatable, particularly meat, which is not literally too hot or too heavy, he will take. But in spite of his morals, or lack of morals, he is cheerful, and in those silent stretches is regarded more as a companion than a nuisance.

This jay seems utterly indifferent to cold. The nest is built in February or March, and eggs and young have been found with the thermometer below zero.

Along with the shrike, the Canada jay shares the somewhat doubtful honour of being called the "butcher bird". This, however, is not because he kills other birds, but because he is very fond of meat and will always be around when any butchering is being done. He will sit around exchanging low, weird calls with his friends and wait to be thrown a piece, or until he can get a chance to help himself. He is content with the refuse, and not at all destructive except on a very small scale.

I can well remember how the coming of these birds in the fall was welcomed by the boys of an Ontario bush farm, and

how friendly they became if fed all winter. The memory also lingers of one which had lost its leg in a trap returning for more than one winter. Always they vanished in the spring and as surely returned in the fall, going and coming suddenly, almost silently. When people speak of the whiskey jack as a garrulous thief, delighting only in bad language and evil deeds, they surely do not know the bird well.

SUBFAMILY CORVINÆ: CROWS AND RAVENS

A well known group of birds noted for harsh voices, omnivorous appetites and doubtful morals. They have vocal organs which should fit them for singing, yet none of them produce any musical sounds. The soul of music seems to be lacking. The group is too well known to need any precise definition.

Raven: *Corvus corax*.

Length: About two feet.

Description: Greenish-black throughout. Bill large.

Breeding habits: Nest a bulky structure of coarse sticks, sometimes in trees but usually in cliffs. Eggs 2 to 7, pale bluish-green or olive, variously spotted with brown.

Season and range: Northern North America, south in winter to the United States.

The raven is not an uncommon winter visitor in any part of the Canadian prairies, but only breeds in the northern woods or on cliffs even beyond the range of trees. It can be easily identified by its colour, its large size, its soaring hawk-like flight and its hoarse croak.

Crow: *Corvus brachyrhynchos*.

Length: 18 to 20 inches.

Description: Glossy black, the male with just a tinge of purple

when in full plumage, the female more dull black. Bill and feet black.

Breeding habits: Nest a loose bulky structure of twigs with lining of finer material, placed in the boughs of a tree or tall shrub. Eggs 4 to 7, greenish blotched with brown.

Season and range: A summer resident across the prairie, perhaps resident in places.

Perhaps no bird is as commonly known as the crow, and not many have so few friends. His somber appearance and unmusical voice have perhaps done as much to make him unpopular as his doubtful morals. His conduct has been the subject of many investigations, and although not exactly proved innocent, he has succeeded in establishing at least a fairly respectable character. To the charge of doing more harm than good the investigators have returned something resembling the Scotch verdict: "Not guilty, but don't do it again." It is true that he robs the nests of other birds and pulls up and eats the sprouting corn but not very many ever carry off young chickens. As corn is not extensively grown on the prairies our count against him is that he destroys the nests of other birds. On the other hand he has been proven beneficial, in that he eats many kinds of insects that are injurious. But there again he does not benefit us, as very few of the insects he devours are serious pests with us. The cut worm is a pest and there does not seem much evidence to show that the crow does anything to lessen it. So far as the farmer is concerned, the crow seems almost neutral except for the charge against him of robbing nests.

This charge has been urged very strongly of late, being given as a reason for the decrease in numbers of the prairie chickens and ducks. For years the question has been discussed with the net result that, to misquote Sir Roger de Coverly's well-known expression, "much has been said on

both sides". The law has stood aside and let the different factions have their way as he is not protected in any province, and the demand is often made that a bounty be placed on his head. Crow shooting in the spring may be legally indulged in, and by some is strongly recommended. Others regard it as a shameless destruction of one of nature's most finished products.

While the part the crow has played in the depletion of game birds has not been settled, there are some things may be said with certainty. Before the settlement of the prairies crows were not plentiful. Dr. Coues reported that "crows are not very common in the region under consideration", when he crossed in the latitude of the international boundary, with the Boundary Commission, in 1874. Sir John Richardson and Macfarlane both speak of finding crows' nests as though they were uncommon, and the early settlers all agree that crows were formerly scarce on the prairie. With the coming of man his food supply increased, and the crow increased in numbers out of all proportion to other birds and, as a result, the balance of nature has been disturbed. The increase has gone beyond the natural limits and some readjustment must be made. Either the food supply must be increased or the numbers decreased. What then more likely than that in the struggle for existence, a much greater demand should be made on such food as other birds supply. It is a struggle between the forces of nature, and in nature the battle is usually to the strong.

Whether or not man can take any determining part in this struggle is not plain. The crow is exceedingly wary, and no attempts made to lessen his numbers have ever had much effect, and possibly never will. Only a decreasing food supply or the destruction of the breeding locations will produce that result.

Clark's Nutcracker: *Nucifraga columbiana*.

Length: About 13 inches.

Description: Head and whole body a uniform lead gray. Wings black with white tips on the secondaries. Two central tail-feathers and upper coverts all black, the next two feathers partly black, the other tail-feathers and under tail-coverts white. Bill black, very large and strong for the size of the bird, sharp pointed, the upper mandible the longer. Feet black. Sexes coloured alike, the female the smaller. Young similar but brownish.

Breeding habits: Nest of sticks and strips of bark on a horizontal branch of an evergreen. Eggs 2 or 3, grayish or greenish, speckled with brown.

Season and range: A resident in the Rocky Mountains and foot-hills and extending eastward at least to Cypress Hills.

This is a very striking bird, restless and noisy, and with a suggestion of the woodpecker in its flight and actions. It has a tendency to flock and will be found at times among the pines of its range in very large numbers.

It is essentially a bird of the forests and not of the prairies, but it ranges widely in search of food and there are rumours of stragglers even in Manitoba, but I have not been able to locate any authentic record.

FAMILY ICTERIDÆ: BLACKBIRDS AND ORIOLES

A well marked group of birds, resembling in general structure the corvidae, but having nine primaries instead of ten.

Some of this family are among our best singers, and they all make a more or less successful attempt. Its members show great diversity of habits. While the grackles are quite as great thieves, and almost as unmusical as the crows, yet the oriole, bobolink and meadow lark are among our most desirable singers.

Bobolink: *Dolichonyx oryzivorus*.

Length: 6.5 to 7 inches.

Description: Male: General colouring black, back of the neck buff. Part of the back and upper tail-coverts white. Some yellowish markings on the wings. Bill black, feet brown.

Female: Yellowish-brown above and lighter and more yellowish below, all streaked with black. Bill and feet brown. Young and males after the breeding season have the same plumage as the female.

Breeding habits: Nest of grass on the ground in moist meadow-land. Eggs 4 to 6, gray with brown clouding.

Season and range: A summer resident across the prairies but most abundant in Manitoba and eastern Saskatchewan. Rather local in its distribution.

The male wears his gay plumage of black, white and buff for only a short time, but that is the period of song. In fact that is about the only period we have bobolinks. The plain brown bird with black streaks, which we see in the fall, is not the bobolink of the spring. Never has a change of plumage been accompanied by such a complete transformation in a bird. It has lost the spirit of song which is the real bobolink. Flesh and feathers remain, but the bird soul is gone and will only return with the coming of a new spring and all the re-awakening to new life which that season means.

In June we may find these birds nesting in any moist, grassy place and often a number of pairs in the same locality. It is then they produce that wonderful song for which the bird has become famous in the life and literature of the continent. As soon as the young are hatched domestic cares produce an effect. The care-free songster becomes the provider for a growing family. This means more work and, therefore, plainer clothes. By early July he has ceased to



1. Male

2. Female

BOBOLINK

sing and has taken on the plumage of his mate, and soon adult males and females, mingled with the young of that season, all look alike. They move about in small flocks or mingle with the blackbirds, and on migrating become the "rice birds", or "reed birds", of the ricefields and marshes. As such, they are shot and sent to the city market.

The change in colour from the gay and musical "Robert of Lincoln" to the plain and silent reed bird is not brought about by the usual means. Generally a bird changes its colour by a "moult", that is, by a change of feathers. The old feathers drop out and new ones of a different colour grow. Not so with the bobolink. The plain, streaky-brown coat was concealed beneath the gayer covering, and when he wishes to appear in the plainer role, the bright-coloured ends drop off the feathers and our songster of the spring meadows becomes the ravager of the autumn rice fields.

Cowbird: *Molothrus ater*.

Length: 7.5 to 8 inches.

Description: Male: general colour glossy greenish-black. Head and neck brown. Bill and feet black.

Female: Almost uniform dull grayish-brown, rather paler below. Young the same as the female but more variegated.

Breeding habits: No nest, eggs laid in the nests of other birds.

Eggs speckled brown and gray on a whitish ground colour.

Season and range: A summer resident across the prairies.

Inoffensive, and in some ways beneficial as it is, the cowbird is not popular, owing to its habit of building no nest. Generally the eggs are found in the nests of smaller birds, and often the young cowbird grows so much faster than the rightful occupants of the nest, that it crowds them out or gets all the food. It is not at all uncommon to see a yellow warbler feeding a young cowbird much larger than

itself, after it has left the nest. I never saw a warbler feeding both its own young and the cowbird, and it may be that in most cases all the food goes to the intruder and the young warblers perish. This habit makes the bird unpopular and it would take a lot of other good qualities to balance the account.

Yellow-headed Blackbird: *Xanthocephalus xanthocephalus*.

Length: 10 to 11 inches.

Description: Male in full plumage: Head, except a small patch about the eye, neck and breast, bright yellow; the rest of the body and around the eye black, except for a white patch on the wing.

Female, male in fall, and young: Dark brown, with throat, neck and line over the eye dull yellowish.

Breeding habits: Nest beautifully woven, made of leaves of grass or cat-tails, lined with finer material and supported between stems of rushes or cat-tails, usually over water.

Season and range: A summer resident on the prairies, north to latitude 58 degrees.

The males of this species are unmistakable in their full plumage, but the female is less noticeable. The birds are very plentiful, nesting around sloughs and in the larger marshes all across the prairie. They generally nest in colonies, and the site is not easy to reach, being in a boggy place. The bright plumage and the loud discordant notes of the birds, however, usually show clearly where the nest may be found by anyone who wishes to wade for it.

The nest itself is one of the most carefully constructed of bird homes, being so skilfully woven that nests of several former years may usually be found in any colony. As a neighbour for other birds, however, the yellow-head is not desirable.



RED-WING

Red-wing: *Agelaius phoeniceus*.

Length: From 8 to 9 inches.

Description: Male: Glossy black, the lesser wing-coverts scarlet bordered with brownish-yellow, buff or white; sometimes traces of red on the edges of the wings and below them.

Female: Brown and black finely speckled and streaked, with obscure reddish colouring on the wings.

Breeding habits: Nest of grass in a low bush or tuft of reeds near or over water. Eggs 4 to 6, light blue or bluish-gray, oddly lined or spotted with darker colours.

Season and range: A summer resident across the prairies, common around wet places.

The red-wing, or red-winged blackbird, is so common and so well marked that all may see it and no one can mistake it. Wherever there is marshy land you may hear its strident but cheerful song; and the black bird with red shoulders is unmistakable. The female, however, is not so noticeable. She is a dull, streaky brown, but has the same harsh call note as her more brilliant mate. The red-wings seldom occur in large numbers, but nest in isolated pairs around every marsh or slough across the prairies. The nest is placed not far above the ground in a bunch of reeds or bushes, and is made of any coarse material convenient, but lined with fine leaves or grass.

Western Meadowlark: *Sturnella neglecta*.

Length: 10 to 11 inches.

Description: Upper parts gray but much variegated. Crown gray with a white line through the centre; a white line above the eye; neck and sides of the head gray. Tail black and gray, except the outer feathers, which are white. Sides white spotted with black. Under parts yellow with a black crescent on the breast.

Breeding habits: Nest of grass, on the ground, in a tuft of grass which arches over it to form a covering. Eggs 4 to 6, white speckled with brown.

No bird is better known than the meadowlark. It comes to us about the end of March, before the snow is entirely gone, and often remains until it has come again in late October. In all bird migrations the adventurous males

precede the females by a few days. In the case of the meadowlark a few adventurers often precede the general male migrations. How insect-eating birds can find anything to live on before the snow of a Manitoba winter has melted is hard to see, and it is altogether likely that for a while they live on seeds.

The song is as well known as the bird itself. Although too short by half, it is very cheerful and one wonders why the bird does not complete the melody.

No doubt this bird came to be called a lark from its habit of soaring, and sometimes singing while on the wing. Still, neither flight nor song are at all lark-like, and it is much more closely related both in flight and structure to the blackbirds. Its hoarse, clucking call-note alone would disclose its relationship to the latter.

Added to their cheerfulness the meadowlarks are very sociable. Of our native birds, only the robin, wren and chipping sparrow will live so close to human habitation. Every spring they come around our school grounds in Brandon, singing from the telephone poles, the fence and the ground. Their well concealed, although otherwise exposed, nests are found on the adjacent vacant lots; and the young, if they can run the gauntlet of the cats, mature right under our eyes.

Baltimore Oriole: *Icterus galbula*.

Length: About 8 inches.

Description: Male: General colour a brilliant orange. Head, throat, part of the back and part of the wings black. Some white spots on the wings. Central tail-feathers black. Bill and feet black.

Female: Dull orange below and smooth shades of brown and dull olive above.

Breeding habits: Nest, a hanging pocket closely woven of fibres of various kinds, and fixed in the fork of a swaying

branch in a tree-top. Eggs 4 to 6, whitish with scrawling brown marks.

Season and range: A summer resident across the prairie mixing with the next species toward the west.

The orioles reach us towards the end of May, the first to arrive being males in their most gorgeous plumage. At first their shrill, clear and ringing call-note is heard almost incessantly, but not until the females come a few days later, does the season of song begin. There are many sweeter bird songs than the oriole's, but none that are more welcome. Both in appearance and note the birds are so striking that their coming seems to mark an epoch. To say that the orioles are here is to say that summer has begun.

The nest is as distinctive as either colour or song, and has always excited admiration. It is placed high in a tree and so is seldom reached from the ground, while the deep sack makes it impossible for a hawk or an owl to reach the young birds with his talons. It is said that when nesting near houses they do not make the sack so deep, because there the owls are less likely to molest them.

Bullock's Oriole: *Icterus bullocki*.

Length: 8 to 8.5 inches.

Description: Male: Closely resembling the Baltimore but rather larger; more orange about the head and a large white patch on the wing. Young and female closely resembling the Baltimore.

Breeding habits: Nest and eggs could not be distinguished from those of the Baltimore.

Season and range: A summer resident on the prairies east to about Medicine Hat, where its range seems to overlap with that of the Baltimore.

This bird is so like its better known representative that



Baltimore Oriole.

Rose-breasted Grosbeak

JUNE—CITY AND COUNTRY.

the two are not usually distinguished. It replaces the Baltimore in the western part of the continent and mixes with the preceding in Alberta and western Saskatchewan. There seems to be some ground for believing that hybrids are found in the region where the ranges of the two species meet. In eggs, nest and habits the two are indistinguishable.

Rusty Blackbird: *Euphagus carolinus*.

Length: 9 to 9.5 inches.

Description: Male: In breeding plumage shiny black, greenish in strong light, the head not differing from the body in iridescence, usually with some of the feathers of the back and wings edged with rusty brown. Bill and feet black.

Female: Rusty brown; the tail and wings dull greenish-black with rusty edgings on some of the feathers.

In fall, adults of both sexes and young become rusty brown.

Breeding habits: Nest of sticks, grass and mud, lined with fibres, and placed in bushes or low trees. Eggs 4 or 5, greenish or bluish and variously marked with brown.

Season and range: An abundant summer resident in moist bushy places across the prairie.

The rusty in some respects resembles the cowbird more than the grackles, although formerly classed with the latter. They mingle with the cowbirds after the young are grown, but may be distinguished by their larger size. They go in small flocks and are not obtrusive birds.

Brewer's Blackbird: *Euphagus cyanocephalus*.

Length: 8.2 to 9.75 inches.

Description: Male in breeding plumage, glossy greenish-black with a violet tint on the head.

Female: Brownish-slate, the brown more pronounced toward the head, and with a soft silky gloss.

Breeding habits: Similar to the rusty.

Season and range: A summer resident on the North American plains north to Peace River.

This is perhaps the most common blackbird across the prairie, particularly in bushy places. It comes about the same time as the others but stays later in the fall. Often one of these birds may be seen long after the snow has come and the temperature has been down to zero. It is perhaps the most evenly distributed and commonest blackbird throughout the whole prairie region, and forms a considerable part of the mixed blackbird flocks in the fall. It comes about the first of April, generally along with the grackles, and during the summer may be seen nesting any place where bushes and water are found.

The uniform black with a satin-like gloss and a slight greenish cast is the distinguishing colour of the male. It has less brilliant iridescence than the bronze grackle and no reddish tinge like the rusty. The only variation in its coat is the rather darker shade of the head, which is violet purple rather than greenish. The female is duller and a rather slaty-black below.

Bronzed Grackle: *Quiscalus quiscula*.

Crow Blackbird.

Length: 12 to 13.5 inches.

Description: Male: Glossy iridescent black, showing various metallic tints, varying with parts of the bird, age, season and vigor; body shining brassy, neck and breast blue, wings and tail purple. Bill and feet black; eyes yellowish.

Female and male in the fall: Similar but more rusty.

Breeding habits: Nest in bushes, holes in trees and similar places, of various materials and fairly well made, lined with mud. Eggs, dirty blue or green variously streaked and blotched with darker, but very variable.

Season and range: A summer resident across the North American plains, north to Great Slave Lake and east to Labrador.

This is the largest blackbird we have and it may be readily known by its bright colours and large size, particularly its long tail. The colours are very changeable in different lights, and are only seen at their best in the adult male in the mating season. Later they become less metallic but always distinctive, the body, neck and wings showing different tints.

If fine feathers were the measure of the bird, surely this grackle is one of the best. But his good qualities end there. His song is a rather poor effort, but, though not musical, there is a certain cheerfulness about it. We would forgive his poor vocal performance if he left other birds' nests alone. He is one of the worst egg-stealers among birds, and even has a reputation for carrying off young chickens.

To be sure he eats a lot of insects and in that way is of service, but no sooner is the harvest on than his taste is for grain, particularly oats. Few farmers will believe that the blackbird is anything but a nuisance, and even those who would defend him hardly know whether the balance of good and evil is for or against the grackle.

FAMILY FRINGILLIDÆ: FINCHES, SPARROWS, GROSBEAKS AND BUNTINGS

Seed-eating birds with strong cone-shaped bills and the line between the mandibles taking a sharp turn downward near the angle.

This is a very large family of well-known birds which mostly frequent the ground or shrubberies, although some prefer the tree tops. The value of this family in eating seeds is more than can be estimated. It is calculated that one seventh of all our birds belong to this family.

COLOUR KEY OF MALES IN BREEDING PLUMAGE

Conspicuously marked with red.

Head, back and breast tinged with red, deepest on the head.

Wings and tail gray or blackish.

Large winter birds with heavy beaks.

Pine Grosbeak. Page 224.

Smaller winter birds, the mandibles crossed at the tip.

Crossbill. Page 226.

Upper parts black and white, lower parts white with a deep rose patch on the breast. A large summer bird with heavy bill.

Rose-breasted Grosbeak. Page 252.

Small gray winter birds with red crowns and a suffusion of red on the breast. Generally in flocks.

Redpolls. Page 229.

Sides reddish brown, the other parts black and white. - A rather large bird of the woods.

Towhee. Page 251.

General colour rosy red, brighter toward the head and fading to white on the belly. A small bird with a musical song.

Purple Finch. Page 225.

Front part of the body gray, the hinder part rosy red.

Gray-crowned Rosy Finch. Page 228.

Conspicuously marked with yellow.

Whole body except the wings, tail and crown, yellow shading to blackish towards the head. Winter birds with heavy bills.

Evening Grosbeak. Page 222.

Small gray birds with canary-like note, mostly seen in flocks and showing yellow on the back when they fly. Seen often in winter.

Pine Siskin. Page 231.

Bright yellow, all except wings, tail and crown.

Goldfinch. Page 230.

Conspicuously marked with black or slate-colour.

All black except the reddish brown sides and white belly.

Towhee. Page 251.

All black except white markings on the wings.

Lark Bunting. Page 254.

Whole breast and at least part of the head black, the rest of the general colouring gray. Sparrow-like birds of the open prairie.

A summer resident nesting in the open spaces.

Chestnut-collared Longspur. Page 235.

A spring and fall migrant.

Lapland Longspur. Page 234.

Smith's Longspur. Page 235.

Upper parts black and white, lower parts white with a patch of deep rose on the breast. Bill heavy.

Rose-breasted Grosbeak. Page 252.

Head almost wholly black, the body streaky black and white.

A very large sparrow with a black head.

Harris's Sparrow. Page 240.

Whole upper parts slate-coloured shading to black on the head; or sometimes tinged with brown. Under parts white.

Slate-coloured Junco. Page 247.

Conspicuously marked with white.

General body colouring white with some darker markings on back, wings and tail.

Snow Bunting. Page 233.

Not conspicuously marked with red, yellow, black or white.

Outer tail-feathers white. Breast streaky or spotted.

Vesper Sparrow. Page 237.

Outer tail-feathers not white. Marking of the breast forming a more or less distinct spot; song loud and musical.

Song Sparrow. Page 249.

No spot on the breast and a small spot of yellow over the eye and at the angle of the wings; a small sparrow with a lisping insect-like song, frequenting marshy places.

Savannah Sparrow. Page 239.

Upper parts reddish brown, the breast spotted.

Fox Sparrow. Page 251.

Breast not streaky or spotted. Crown chestnut.

Sides of the breast reddish; a bird of the trees.

Tree Sparrow. Page 244.

Sides not reddish; a bird of low shrubberies.

Chipping Sparrow. Page 245.

Crown white bordered with chestnut; a chestnut patch below and behind the eye.

Lark Sparrow. Page 240.

Crown with chestnut streaks but mostly gray; outer tail-feathers short.

Swamp Sparrow. Page 250.

Crown streaky gray like the back; an ashy ring almost around the neck. The smallest of the sparrows, very plain and with a song *zee-zee-zee*.

Clay-coloured Sparrow. Page 246.

Crown strongly streaked with white.

Throat white.

White-throated Sparrow. Page 242.

Throat not white.

White-crowned Sparrow. Page 241.

Gambel's. Page 242.

Crown gray, throat black, a chestnut patch behind the eye.

House Sparrow. Page 232.

Evening Grosbeak: *Hesperiphona vespertina*.

Length: 7.5 to 8.5 inches.

Description: Male: General colour dull yellow overlaid with sooty olive, darkest towards the head; a yellow band across the forehead and extending backwards over the

eye, feathers at the base of the wings and the rump, yellow; wings black with large white patches; lining of wings black and yellow. Tail black; bill large, greenish-yellow; feet brown.

Female and young: Brownish-gray, paler below, getting whitish on the belly; little, if any, yellow, no large white patch on the wing, but some white on the primaries. Tail spotted with white. Bill large, brownish or similar to that of the male.

Breeding habits: It nests in evergreen trees, the nest being made of sticks and lined with rootlets.

Season and range: A resident or winter visitor from Manitoba west to the Rocky Mountains.

This somewhat striking bird comes to us in the cold weather and is usually found in small flocks feeding on the buds of the Manitoba Maple, *acer negundo*. It is gloomy and silent, easy of approach almost to the point of stupidity, and often looks larger than it really is, owing to a habit of ruffling its feathers, in order that they may enclose more air and thus form a better protection against the extreme cold. When we hear of an oriole or a canary being seen in winter, we know this grosbeak is the bird.

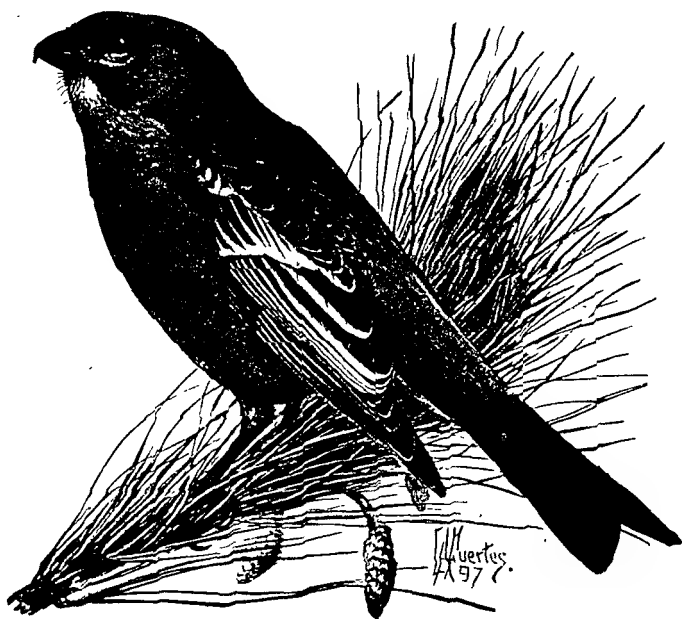
It may be found in winter moving about in small flocks, on any part of the prairie region, but most plentiful towards the eastern part of the range, probably because there the Manitoba maple is most plentiful. Of late years its occurrence is more frequent in the eastern provinces, a fact that some associate with the introduction of its favourite food tree in those provinces.

This bird may breed in the spruce woods at Minaki, as I have seen it there in July, but until very recently the nest had never been found. There is now a definite report of the bird nesting in northern Michigan.

Pine Grosbeak: *Pinicola enucleator*.

Length: About 9 inches.

Description: Male: General colouring rosy-red, a little dusky on the back, and gray below towards the tail. Wings blackish with white wing-bars. Tail the colour of the wings. The rosy colour varies in intensity and only in those of best plumage is it continuous. Bill blackish, heavy.



PINE GROSBEAK

Female: General colour gray with white wing-bars, paler below and a yellowish shade varying much in intensity around the front parts and on the back. Sometimes crown and rump red. The young resemble the female.

Breeding habits: Nest of roots, twigs and fibres on a branch

of a tree. Eggs generally 4, greenish-blue spotted with brown.

Season and range: A winter visitor across the plains, breeding in the northern spruce woods.

The pine grosbeaks, like the evening grosbeaks, come from the northern woods in the winter. They both come, not so much to escape the severity of the weather, as in search of food. The cones of the pines and spruces become so hard when frozen, that even with their strong bills they cannot separate the scales and extract the seeds. This makes it necessary for them to resort to some other food and the seeds of the Manitoba maples seem particularly attractive.

Owing to its size and colouring the pine grosbeak is often mistaken for the robin out of season. When a local newspaper reports robins in January we may know that the grosbeaks are with us.

Purple Finch: *Carpodacus purpureus*.

Length: 5.75 to 6.25 inches.

Description: Male: General colour rosy-red, brighter towards the head and fading to white on the belly; the crown almost crimson and the back darker, rather brownish and streaked with darker. Wings and tail dark, the feathers tipped with brownish-red. The shades of red vary greatly.

Female and young: Olive brown streaked with dusky above, and white with dark markings below. Wings and tail much as in the male. The young males do not get the full rosy plumage until the second year and in the interval sometimes show yellowish shades.

Breeding habits: Nest of various vegetable fibres and placed on a horizontal bough. Eggs 4 or 5, pale greenish-white slightly spotted or lined with black or brown.

Season and range: A widely distributed, but never plentiful, summer resident or migrant across the plains, nesting in trees in the wooded districts, more particularly towards the north of the prairie region.



This finch is one of the most likable of birds, but unfortunately is not sufficiently plentiful to be very well known. Its sweet song and brilliant plumage have made it popular in some places as a cage bird. With us it does not show much tendency to nest about the gardens, but may be seen quite regularly in migration in the trees along the streets. Its song is enough to make it popular, and, if more plentiful, it would undoubtedly rank with our most highly valued birds.

Crossbill: *Loxia curvirostra*.

Length: About 6 inches.

Description: Male: General colour red, the wings and tail blackish with no white marking, the back brownish. Lower parts pale red or gray. Mandibles crossed at the tips. Only in the best plumage is the red colouring continuous, and this is seldom seen. The shades of red vary greatly.

Female and young: Dull greenish-olive mixed with gray or often with a wash of yellow; mostly gray below. Bill as in the male. The young males show intermediate stages of colouring.

Breeding habits: Nest of twigs, rootlets and grass, lined with finer material and placed among the smaller branches of a tree. Eggs 3 or 4, greenish spotted with brown.

Season and range: A somewhat erratic winter visitor across the prairies, nesting in the spruce forests, mostly north of the prairie.

The crossbill may be easily recognized by its rather slender bill with the mandibles crossed at the tips. Coming as it does in the winter, the only birds with which it can be confused are the white-winged crossbill and the pine grosbeak. It is much more slender than the grosbeak and a brighter red, while its bill is longer, not so stout and crossed. The two birds are easily distinguished even at a



AMERICAN CROSSBILL

distance. The absence of white markings on the wings will distinguish it from the other crossbill.

It appears irregularly and is most often seen among the spruce trees. Near the towns I have seen it more often in the fall or spring than in the depth of winter, possibly because the season is more favourable for moving about. In any locality it may not appear at all for several years and then be rather common for a season.

The white-winged Crossbill, *Loxia leucoptera*, differs from this species only in having white markings on the wings. In habits and occurrence it resembles the common crossbill but is more rarely seen.

Gray-crowned Rosy Finch: *Leucosticte tephrocotis*.

Length: About 6.75 inches.

Description: Male: Front part of the body brown, varying greatly in shade; hinder part both above and below rosy or carmine-red, due to the red edges of the dusky feathers. Wings and tail blackish, some of the wing-feathers edged with rosy or white. Front of the head black; the rest of the top of the head gray reaching down to the eyes. Bill and feet black.

Female: Identical with the male in markings, but much duller in tone. In fall and winter plumage the male resembles the female and both have yellow bills.

Breeding habits: The only nest recorded was taken at Banff on June 9th, 1892, by Mr. Wm. Fear. It was in a crevice of a rock and made of roots and bark lined with fine grass. The eggs were pure white.

Season and range: An Alpine resident species breeding in the Rocky Mountains at an altitude of 5,000 feet upwards, and occasionally straying across the plains even to Manitoba. According to Seton, one was taken near Birtle in January, 1891, by Mr. Geo. Copeland. Mr. L. B. Potter reports them as regular winter visitors at Eastend in south-western Saskatchewan, and Mr. Geo. Lang reports them at Indian Head.

This finch is a truly mountain species and its occurrence on the plains is as a winter visitor or straggler. It is a regular resident, however, of the Rocky Mountains of western Alberta and is likely to be found anywhere through the foothills, and even at intervals in wooded districts eastward across the prairies.

Redpoll: *Acanthis linaria*.

Common Redpoll.

Length: About 5.5 inches.

Description: Male: Upper parts variegated with brownish-yellow and blackish, the feathers with dark centres and yellowish edges; the lower part of the back streaky and sometimes tinged with rosy. Throat, a streak from the eye to the bill and front of forehead, black. Crown dark crimson. Under parts white, the breast with a wash of rose-red, very variable in shade and extent. Wings and tail dark, some of the feathers edged with white. Feet dark.

Females: Generally duller and lacking the wash of rose-colour. The young resemble the female but are rather more yellowish.

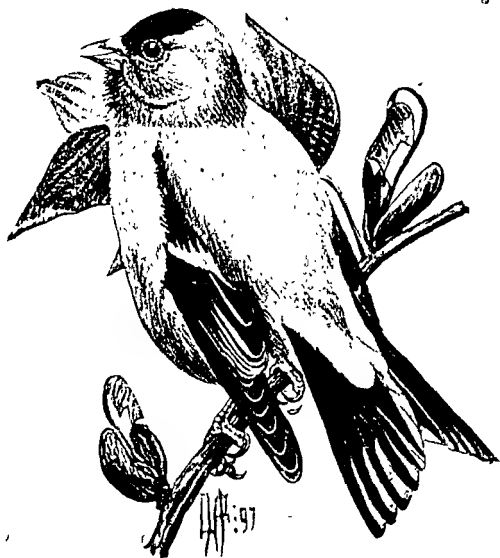
Breeding habits: Nest in low bushes. Eggs 4 or 5, pale bluish finely speckled with brown.

Season and range: A winter visitor from the far north.

This abundant, but rather erratic, little visitor comes to us every winter from the north, where it nests about the northern limit of trees. It travels in small, compact flocks, often mixed more or less with the preceding, and feeds on the seeds of any weeds that may be left projecting above the snow. When the snow is deep it is driven by necessity into the towns and about buildings, where it gleans a precarious living of pickings from the yards and streets.

They are the merest mites of birds, these redpolls, yet it is simply amazing how much cold they can stand. In the

severest weather they hop about, picking up their scanty fare with the greatest good cheer, and their clear canary-like note may be heard when even the house sparrows are dumb. When all the world seems dreary these flocks bring a note of cheer, and shame those of us who are inclined to complain of the cold, although comfortably housed.



AMERICAN GOLDFINCH

Goldfinch: *Astragalinus tristis*.

Wild Canary.

Length: About 5 inches.

Description: Male: Body bright yellow. Wings, tail and front of the head black, the wings and tail with some white markings. Feet and bill flesh-coloured.

Female: Olive above and yellowish below. The young and the male in the fall resemble the female.

Breeding habits: Nest of fibres, lined with down, in a low bush. Eggs 4 to 6, bluish-white.

Season and range: A summer resident across the prairies.

The wild canary, or thistle bird, is so well known that it needs no introduction. Nature has made few birds combining so many good qualities. In colour, song and habits it is above reproach. A careful housekeeper, an attentive parent, and a good singer, it brings a dash of colour and life into its surroundings and asks nothing in return but to be allowed to eat the seeds of the thistle, or if there are no thistles, then the seeds of some other weeds. One would think that even the cats would respect the rights of such a bird.

Pine Siskin: *Spinus pinus*.

Length: About 5 inches.

Description: Brown and gray striped, rather lighter below, the whole body sometimes with a tinge of yellow which is very distinct on the rump and on the upper parts of the tail-feathers and the primaries. White edgings on wing and tail-feathers. Bill and feet brown.

Breeding habits: Nest of moss and fibres, on a bough of an evergreen tree. Eggs 3 or 4, light blue.

Season and range: A fairly common winter visitor across the prairies and seen so often in summer that it may be resident about the spruce woods.

In note and flight the siskin very closely resembles the wild canary. It comes to us in the winter, often in large flocks which might possibly be mistaken for flocks of red-polls. It is easy, however, to distinguish the two species, as the siskin shows a patch of yellow on the lower part of the back when it flies. Its appearance is very irregular and birds may be seen at any time of the year, indicating that they either breed somewhere near or are irregular

in their season. The general breeding location is the spruce forests north of the prairie, or perhaps in the mountains.

House Sparrow: *Passer domesticus*.

English Sparrow.

Length: 5 to 7 inches.

Description: Male: Upper parts gray streaked and marked with black and reddish. Lower parts gray or whitish. One white wing-bar. Throat black, running down the breast. A chestnut patch behind the eye, separated from the black of the throat by dirty white or gray. Bill black or bluish-black, feet brown.

Female: Upper parts brownish-gray streaked with yellowish-brown and black. Paler beneath. The young resemble the female.

Breeding habits: Nest of straw, string or any material available, bulky and untidy and placed in trees or about buildings. Eggs 5 to 7 or more, whitish thickly marked with brown.

Season and range: An abundant resident particularly about towns.

The English sparrow is among birds what a weed is among plants. In the old world, where man and nature have contended for mastery for so long, certain hardy races of plants and animals have managed to hold their own, even against all efforts to exterminate them. They are exceedingly prolific, and in the severest struggle the hardiest and most adaptable are able to survive. In that way, by killing off the weak and ill-fitted, these races have become so prolific, so hardy and so able to suit themselves to circumstance, that it is impossible to get rid of them. Generally they are a nuisance but we must endure them. Among plants there are weeds; among mammals the Norwegian rat is the best example; and among birds the English sparrow. It is not slang to say that this sparrow is the weed or rat of the bird world.



SNOWBIRD

Snow Bunting: *Plectrophenax nivalis*.

Length: 6.5 to 7 inches.

Description: Male: Pure white, except the bill and feet and some black on the back, wings and tail; or tinged with brown on the back and about the head. Bill yellowish tipped with black. Feet black.

Female: The black parts are dull or brown, and mixed with white, spread to almost the whole upper parts. The male in winter is more brown than black in its markings.

Breeding habits: Nest of a large quantity of grass and moss, plentifully lined with feathers and placed in the moss or tufts in sphagnum bogs within the Arctic circle. Eggs 4 to 6, white variously marked with brown.

Season and range: A winter visitor, coming to us about the first fall of snow and likely to be seen in flocks all winter.

People often wonder whether the snowbird is really different from our summer birds, or if it is the "graybird" of summer turned white. The rabbit and weasel turn white in winter, why not the "graybird"? There need be no doubt about the matter. It is a different kind of bird and spends its summer far north, always keeping within touch of the snow. It comes to us in winter and passes on farther south, as far, in fact, as the snow goes. It moves about in small flocks, feeding on the seeds of weeds that project from the snow, and we may see it any time during the winter. In the spring these flocks unite and move northward, gaining in numbers as they go, and sometimes we see the birds covering the fields in immense numbers. They seem to have regular lines of migration, as I have seen flocks almost continuous for several miles, and then scarcely another bird in a half day's travel by train.

Lapland Longspur: *Calcarius lapponicus*.

Length: About 6.5 inches.

Description: Upper parts brownish-black, streaked with whitish which forms the edgings of the feathers. Under parts white, streaked with black on the sides. Wings dark with light edges to the feathers. Tail dark, the three outer feathers marked with white. Crown, sides of the head, throat and breast black bordered with whitish or yellowish, a well defined yellowish stripe from the eye back to the chestnut of the neck. A broad chestnut band across the back of the neck.

Female: Same markings as the male, but less continuous and duller, some of the markings scarcely showing.

In fall and winter the black hood and chestnut collar of the male are overlaid with brown or gray.

Breeding habits: The nest much the same as that of the snow-bird. Eggs 4 to 6, greenish or gray very heavily marked with brown.

Season and range: An abundant migrant passing south in October and returning north again in April and May.

With us these longspurs are birds of passage. They nest in the barren lands beyond the limit of the trees and northward to the Arctic circle. Seton says: "Beginning exactly at the edge of the woods, and continuing as far as we went in the barrens, in 1907, were countless Lapland longspurs. I think I did not see a dry ten acres in the treeless region that was without at least two pairs of longspurs." In the fall they go south in large flocks, usually in company with other birds, and spend the winter in the central and eastern states, not going farther south than Kansas.

Smith's Longspur, *Calcarius pictus*, very much resembles the Lapland in its habits and range but is not as regularly seen. It has less black about the head but the resemblance otherwise is sufficient to indentify it.

Chestnut-collared Longspur: *Calcarius ornatus*.

Length: 5.75 to 6 inches.

Description: Male: Above, brown marked with gray, the lesser wing-coverts black, crown black, a whitish spot on the neck in front of a collar of deep chestnut; a broad white stripe above the eye. Sides of the head and throat, dirty white with a black patch behind the eye. Breast and belly black, sometimes mixed with reddish. Lining of wings, sides, lower belly and under tail-coverts white. Two or three feathers on each side of the tail white. Feet dark with long hind claws.

Female: Resembles the male but the markings not well defined, making an obscurely coloured bird. Breast dull brown.

Breeding habits: Nest of grass on the ground on the open prairie. Eggs about 4, white clouded with dark.

Season and range: A summer resident across the prairies west from the Red River valley to the mountains and northward to Great Slave Lake.

The chestnut-collared longspur is a bird of the open places and is most at home on the ground. The female resembles the sparrows, but the black breast of the male in breeding season is very distinctive. Pairs or groups may be found in June and July, nesting wherever a piece of original prairie is left, but they do not seem to take kindly to cultivated fields. The male has a sweet but somewhat subdued song and a habit of singing on wing, which makes it quite noticeable. This is one bird for which trees seem to have no attraction. The dry open prairie is its home and it, along with the horned larks and McCown's longspur, gives a real touch of life to the open and semi-arid stretches.

McCown's Longspur: *Rhynchophanes mccowni*.

Length: 6 inches.

Description: Male: Upper parts slate-gray streaked with gray or brown; a chestnut patch on each wing. Crown black. Line above the eye white. Sides of the head whitish. Throat white. A broad jet-black crescent-shaped patch across the breast, shading to slaty-black and whitish behind. Lining of the wings white. Tail white or partly so, except the two middle feathers.

Female: Resembling the male but duller and without the black markings on the head and breast.

Breeding habits: Nest a depression in the ground, lined with grass and placed near a tuft of grass or lump of sod. Eggs about 4, grayish thickly marked or clouded with brown.

Season and range: A summer resident on the open prairie of south-western Saskatchewan and southern Alberta.

This bird is found in considerable numbers from Moose Jaw to the Rocky Mountains and has been seen as far east as Indian Head. It does not seem to range in large numbers much farther north. It closely resembles the chestnut-collared longspur in plumage, habits and nest, and lives in company with it, both being birds of the open prairie.

Vesper Sparrow: *Poæcetes gramineus*.

Length: 5.75 to 6.25 inches.

Description: Upper parts gray streaked with brown. Lower parts dull white more or less streaked with brown. The outer tail-feathers white, showing when the bird flies. No yellow markings.

Breeding habits: Nest of grass in a depression in the ground.

Eggs 4 to 6, whitish thickly spotted with brown.

Season and range: A summer resident across the prairie.

This is the sparrow which runs ahead of one along the ground, finally flying up and displaying the conspicuous white feathers on each side of the tail. It gets its name from the habit it has of singing in the evening. Just after sundown it may be found sitting on the top of some exposed perch and singing its vesper song for all the world to hear. The song resembles in some measure that of the song sparrow, but is inferior both in richness of tone and in variety of notes.

The "vesper" is a bird of the ground, only mounting some low perch to sing, or when flushed from the ground; in the latter case, no doubt, in order that it may the better view the intruder and judge whether or not there is any danger. It is a seed eater, living mostly on the seeds of weeds, and may be considered among our most useful as well as most unobtrusive birds. Its very plain appearance prevents it attracting much attention, but when people speak of the "graybird" this is the bird generally meant.



VESPER SPARROW

In some localities it is called the ground bird, a name which is not altogether inappropriate.

Our western form is paler than the eastern vesper sparrow and any reports from the prairie provinces of the eastern form, commonly known as the bay-winged bunting, are doubtful. The eastern bird is brown rather than gray

and the lesser wing-coverts are bright bay. The western sparrow breeds commonly all across the Canadian plains.

Savannah Sparrow: *Passerculus sandwichensis*.

Length: 5.5 to 6 inches.

Description: Whole upper parts streaked with gray and various shades of brown. Lower parts dull white, streaked with dusky. A yellow stripe over the eye and a tinge of yellow on the edges of the wings. Upper mandible darker than the lower. Feet flesh-coloured.

Breeding habits: Nest a slight depression in the ground, lined with grass and horsehair. Eggs 4 or 5, whitish, speckled with brown.

Season and range: A summer resident across the prairies nesting in moist grassy places where there are some bushes.

The Savannah sparrow is not only plain in colour, but exceedingly shy and is therefore generally overlooked. It keeps pretty well concealed among the grass and bushes of the moist meadows, and sings its thin grasshopper-like song from a perch where it is rather hard to detect. Even its song is not very characteristic. It is a sort of zee-zee-zee, but sufficiently like the songs of many other sparrows to be hard to distinguish. The tone, the location, and the time, as well as the succession of notes, all help the experienced ear to identify the different songs, but the inexperienced will find it confusing; yet it is interesting to make out these distinctions and will pay for the time and patience expended in a sense of satisfaction.

Baird's Sparrow, Leconte's Sparrow and Nelson's Sparrow are all found within the range but not commonly recognized. They are retiring birds frequenting marshy places and both in appearance and song closely resemble the Savannah.

Lark Sparrow: *Chondestes grammacus*.

Length: 6.5 to 7.25 inches.

Description: Upper parts streaky gray. Under parts white. Head peculiarly marked with black, white and chestnut; a white crown with a streak of chestnut on each side; a white line from the bill backward enclosing the eye and passing back to the nape; below and behind the eye a patch of chestnut more or less completely bordered by black; below this a white patch on each side of the neck separated from the white throat by a streaky black line from the bill running downward and backward to the sides of the breast; throat white. Breast white with a rather obscure black spot. Tail very long, the central feathers colour of the back, the rest blackish marked with white, the outer edge of the outer pair entirely white.

Breeding habits: Nest of dried grass on the ground. Eggs 4 to 7, white with some dark markings.

Season and range: A summer resident across the plains, rather rare in Manitoba, and apparently not plentiful anywhere.

This striking sparrow has been found on all parts of the prairies, but it may be that the specimens found about Winnipeg belong more to the eastern than to the western form. The two differ in that the western bird is paler, and the black and chestnut marks about the head are narrower and duller than in the eastern bird. The wings are long and tapering and the tail very long for a sparrow.

Besides being larger and more striking in appearance than most sparrows, it is a good singer and, where common, is a prominent member of the bird population. It is rare in Manitoba and increases in numbers as we go west, but seems to be of local distribution and, on the whole, is not a plentiful species.

Harris's Sparrow: *Zonotrichia querula*.

Length: 7 to 7.5 inches.

Description: Male: Whole crown, face and throat jet black; back streaked with black, white and brown; under parts nearly white. Bill reddish.

Female, young and male in the fall: Similar but colours more obscure.

Breeding habits: Nest of grass and fine bark, lined with grass, placed under a bush. Very few have been found. "The eggs are unlike those of any other sparrow. They are large for sparrows, .88 x .68 inches, and are creamy-white, spotted chiefly at the larger end with rusty-brown and lilac, and have a high polish."—Raine.

Season and range: A spring and fall migrant nesting northward to the limit of trees.

This is the largest and most striking of all the sparrows. It comes to us, during migrations, in flocks along with the white-throat, and, less frequently, the white-crowned sparrows. While it remains it is a quite noticeable bird, gleaning its food from the ground in shrubberies, or uttering its high querulous note from bushes or low trees. Its song is a high-pitched, plaintive note, somewhat resembling the white-throat but without the refrain.

White-crowned Sparrow: *Zonotrichia leucophrys*.

Length: 6.5 to 7 inches.

Description: Upper parts brown streaked with gray, white and blackish; tail brown. Lower parts uniform ashy gray passing in a ring around the neck. Crown pure white bordered on the sides by black stripes that meet in front of the crown; a white stripe from the eye backward, and another dark stripe below, this separating it from the general gray of the sides of the head and neck. Throat whitish shading gradually into the gray of the breast. Bill and feet reddish.

Breeding habits: In nest and eggs scarcely to be distinguished from the white-throat.

Season and range: A migrant across the prairie, where it occurs in flocks mixed with the white-throat and possibly

breeding in some localities, particularly to the east and north.

In habits and appearance the white-crowned is so similar to the white-throat, that few people regard them as separate. It is of a less reddish colour, is rather more suspicious of approach than the white-throat, and not nearly so plentiful. It may be seen quite often with the latter on the ground among the shrubs in either the spring or fall migration, but is more easy to distinguish in the spring.

A colour variation known as Gambel's sparrow, or the intermediate sparrow, to some extent replaces the pure white-crowned in the western part of the range. The two are so nearly alike that a distinction seems scarcely necessary.

White-throated Sparrow: *Zonotrichia albicollis*.

Length: 6.5 to 7 inches.

Description: Upper parts generally streaked with black, reddish-brown and whitish, the reddish quite prominent on the wings. Under parts white shading to brown on the sides and ashy gray toward the head. Crown black with a white line through the centre and a white line on each side which passes over the eye to the bill, changing to yellow between the nostril and the eye. The edge of the wing yellow. In the male these colours are pure and bright in the spring. In the female, and the male in the fall, the markings are the same but more obscure.

Breeding habits: Nest on the ground in the woods, usually under a bush, or rarely in a bush. Eggs 4 to 6, greenish-white; speckled or blotched with gray or brown in almost endless variety.

Season and range: Mostly a migrant on the prairie, but breeding freely wherever the evergreen forests are found.

This is perhaps the most striking of our sparrows. Harris's is larger and others sing better, but next to the

we may expect to find others. The less plentiful white-crowned, Gambel's and Harris's sparrow are almost sure to be with them.

The song of the white-throat is one of our most distinctive, if not most musical, bird songs. It consists of two or three high notes followed by a refrain which has often been interpreted, "peabody, peabody, peabody," and the bird has been called "the Old Tom Peabody bird". It often sings at night, and when, to the shadows of an ever-green forest, you add the stillness and the darkness of night, you have a setting which gives a weirdness to this plaintive song which is more easily felt than described. Often while lying on a bed of boughs under a roof of canvas, and amid a darkness so dense it could almost be felt, the midnight song of this bird has been the only reminder that in reality the forest was throbbing with life, that the enveloping darkness is but a cloak and not a pall.

Tree Sparrow: *Spizella monticola*.

Length: About 6 inches.

Description: Back streaked with black, reddish and yellowish in sharp contrast. Wings dusky with some reddish markings and two distinct white wing-bars. Under parts whitish tinged with gray on the breast and with brown on the sides. Crown reddish-brown bordered with dull white or gray. A streak of chestnut extending backward from the eye. Sides of the head and throat gray, shading into whitish on the breast where there is an obscure dark patch. Bill black above, yellow below. Legs brown and toes black.

Breeding habits: Nest loosely made of grass and bark, lined with feathers and placed in a low bush. Eggs 4 to 6, pale green regularly covered with small reddish-brown spots.

Season and range: An abundant migrant in Manitoba, nesting northward beyond the limit of trees and replaced farther west by a somewhat paler form.

The tree sparrow is an early migrant, coming in flocks early in April and almost always found mixed with the slate-coloured juncos. These mixed flocks stay several weeks, the birds picking weed seeds from the ground but flying into the trees when flushed. They sing freely in the spring migration but the song, a low, sweet warble, is lacking in richness of tone.

West of Manitoba it is replaced by the western form which is somewhat paler, with a shade of yellow on the throat and sides. The two forms are identical in habits and differ very slightly in colour.

Chipping Sparrow: *Spizella passerina*.

Length: A little more than 5 inches.

Description: Upper parts streaked with black and various shades of brown and gray. Lower parts gray, nearly uniform but lighter on the throat. Two whitish wing-bars. Crown chestnut, forehead black, a grayish line above the eye and a black line from the eye backward to the neck. Bill black, feet pale.

A Western form slightly paler than the Eastern is recognized but the difference is very slight.

Breeding habits: Nest carefully woven of fine grass, lined with hair and placed in a low bush, often quite close to dwellings. Eggs 4 or 5, blue very sparingly speckled with brown.

Season and range: A summer resident across the prairies to the mountains.

This is one of the most sociable of all our small birds. It will come about dwellings, sometimes building its nest in a low bush or bit of brush within a few feet of a house. Its small size, chestnut crown and the low "chip" which is its call-note, are quite enough to identify it, and if to these can be added a nest with four blue eggs in some low bush in the garden, the identification will be complete. Besides



CHIPPING SPARROW

its call-note it has a low trill which is its song, and which, while not loud, may often be heard from the shrubberies, particularly towards evening.

Clay-coloured Sparrow: *Spizella pallida*.

Length: 5 to 5.25 inches.

Description: Upper parts clay-coloured, streaked with black; a pale line through the crown, a whitish line above the eye and an ashy gray band across the back of the neck. Sides of the head brown. Under parts dirty white. Bill and feet light.

Breeding habits: Nest of grass, lined with hairs, in low bushes.

Eggs 3 to 6, pale green speckled with brown.

Season and range: A summer resident across the plains.

This pale-coloured bird is a common summer resident on

the bushy prairie from the Red River to the Rocky Mountains. It very closely resembles the chipping sparrow except in social qualities. Its pale colour will usually serve to distinguish it. It frequents bushy prairie and seldom comes about the gardens. Its song is a zee-zee-zee repeated several times.

Slate-coloured Junco: *Junco hyemalis*.

Length: 6 to 6.5 inches.

Description: Uniform dark slate colour, except the lower parts which are dull white. Some of the outer tail-feathers white and very noticeable when the bird flies. Bill whitish. The female has a somewhat rusty tinge.

Breeding habits: Nest on the ground, of grass and fibres. Eggs 4 to 6, whitish speckled with brown.

Season and range: Migrant or summer resident in the wooded regions along the northern part of the prairie.

To most of us the juncos are migrants, although their summer home begins within the range of settlement. Of all migrant birds they are, perhaps, the best known. They come in flocks in early April and swarm about the streets and gardens, attracting attention by their numbers and easily recognized by their uniform and distinctive colouring. Cold weather does not dismay them. A late snow only makes them more tame and familiar, driving them in about the houses for food.

Coming early they stay long enough for us to get to know them, and their chirping call-note becomes as familiar as their sober slate-gray backs and white breasts. But few people hear them sing, although they often do sing before they leave. On a sunny day in May a group of them will give a performance worthy of more celebrated bird choirs, but you must be near by and keep still if you are to hear them.



SLATE-COLOURED JUNCO

In late September they are back again and in the same dress. Other birds often differ so much in spring and fall plumage that people do not recognize the gay spring visitors in the sober garb in which they return. But not so with the juncos. We always know them and they stay until driven farther south by the cold weather in November.





Song Sparrow.
Horned Lark.

APRIL—EARLY SPRING MUSIC.

The pink-sided junco is a colour variation of this species, distinguished by having the sides and some of the wing-coverts tinged with pink or chestnut. It is found in southern Alberta and south-western Saskatchewan, nesting in Cypress Hills.

Song Sparrow: *Melospiza melodia*.

Length: 6 to 6.5 inches.

Description: Upper parts gray and brown or reddish-brown, thickly and rather uniformly streaked. Lower parts white shading to brown on the sides and streaked with brown on the breast, the streaks often running together to form a dark spot on the breast. Crown reddish-brown, rather streaky, and divided with a gray stripe, another gray stripe over the eye on each side. Bill and feet brown.

Breeding habits: Nest in various places, but generally near the ground and in bushes, or on the ground. Eggs 4 to 6, whitish, variously marked with brown.

Season and range: A common summer resident in bushy places or around the edges of woods across the plains.

The song sparrow has nothing striking about its appearance to recommend it. In fact, it is not very distinct in colouring from many of the other sparrows. Its habit of staying always about trees or bushes, and of plunging into the depths of a shrub or tangle when disturbed, has kept it from being noticed very much. In fact we have many birds of more striking appearance, yet it is doubtful if any bird is more popular, and that popularity has been won by its voice alone.

Its call-note is a gentle "chip" not unlike many others, and its alarm note is rather unmusical, with a metallic sound suggesting not only alarm but temper, but its song is superb. It consists of two or three separate notes, a warble and a trill, but these are subject to the greatest

variation. I know of no bird that approaches the song sparrow in variety of song, but always the quality of tone is the same. It is this that gives sweetness to the music and it is by the tone you must learn to recognize the song, if you are not to be often mistaken. Once this is familiar the song is unmistakable; no other sparrow's song equals or even approaches it.

Lincoln's sparrow is an obscure bird resembling the song sparrow but more retiring and with a less musical song. It is seldom seen in the eastern part of the range but is more plentiful in the foot-hills of the Rocky Mountains.

Swamp Sparrow: *Melospiza georgiana*.

Length: About 5.5 inches.

Description: Upper parts brown, sharply streaked with black and gray, the wings and tail much edged with reddish. Under parts, including the sides and breast ashy gray, fading to white towards the tail. Crown bright chestnut or streaked with black, sometimes with an obscure gray line in the middle. A gray line above and a brown patch behind the eye. Bill dark above and pale below. Feet pale.

Breeding habits: Nest and eggs resembling those of the song sparrow.

Season and range: A very common summer resident in marshes with some bushes in them, all across the prairies.

This little bird may be seen about any bushy marsh all summer and seems to stay until quite late. Often during the duck season, it pays a visit to the hunter in his lonely "hide", perching on a low bush, or, clinging like the marsh-wren or yellow-throat to a reed, it peers down at one first with one eye, then with the other. It will, even at that late date, sing its song, which is a weak imitation of the sounding melody of the song sparrow.

Fox Sparrow: *Passerella iliaca*.

Length: 6.5 to 7.25 inches.

Description: Whole upper parts rusty-red, somewhat streaky on the back and deepest and most uniform on the wings and tail. Lower parts white streaked or spotted with rusty-red except towards the tail. Two whitish wing-bars. Bill dark above, yellow below. Feet pale.

Breeding habits: Nest on the ground or in the bushes. Eggs greenish-white speckled with rusty brown.

Season and range: A rather abundant but somewhat erratic migrant, nesting from the northern edge of the prairie northward.

The fox sparrow does not look like any other sparrow. I have mistaken it in flight for the hermit thrush, but never at any time for any other sparrow. The prevalence of the rusty-red colour over the usual gray of the sparrows makes a sharp distinction. With us it is a migrant, and when it comes, it comes in abundance. Large flocks may appear overnight and for a while fill the trees of the streets with colour and song. Then it goes, and the next year it may not come at all.

As a singer this is one of the best. To be sure an individual performance is very far behind the song sparrow at its best, but in migration it sings in chorus. Then, at close range, the effect is worth while, but it is not the sort of music one can enjoy from a distance. If it came more regularly and sang its song for all the world to hear, this large and beautiful sparrow would eclipse either the white-throat or the song sparrow, but it chooses to have its way, and those who would enjoy it must know it, and also when and where to expect it.

Towhee: *Pipilo erythrophthalmus*.

Length: 7.5 to 8.75 inches.

Description: Male: Head, neck, breast and whole upper parts,

black. Sides light reddish. Belly white. Some white on the outer tail-feathers and on the wings. Bill black. Feet, brown.

Female: Similar to the male but duller and paler, gray or brown instead of black.

Breeding habits: Nest on the ground, under a bush or log in the woods, and made of grass and fibres, lined with hair. Eggs 4 or 5, white thickly speckled with reddish-brown.

Season and range: A not uncommon summer resident in southern Manitoba and perhaps westward into Saskatchewan, frequenting sheltered bushy places.

It is more its retiring nature and the places it frequents than its scarcity, that makes the towhee so little known. It has been reported as far north and west as Touchwood Hills, but one must go into the tangles to see it. Occasionally I see a few in the shrubberies about town during the migrations. On the whole it is a silent bird, the note from which it gets its name being heard but seldom, unless it is disturbed in its nesting locality.

In the western part of the range it is replaced by the Arctic Towhee, *Pipilo maculatus*, which differs in having the black more mixed with brown or streaks of white.

Rose-breasted Grosbeak: *Zamelodia ludoviciana*.

Length: 7.75 to 8.5 inches.

Description: Male: Upper parts generally black. Belly, lower back and parts of the wings and tail, white. Breast, rose-red extending under the wings. Bill heavy, white.

Female: Streaky brown, much darker above and a white stripe over the eye; yellowish under the wings and no rose colour. Bill heavy, brown.

Breeding habits: Nest well made of grass and fibres, placed in a low tree or bush. The female very tame when on the nest. Eggs 3 to 5, dull green, spotted with various shades of brown.

Season and range: A summer resident in wooded districts across the prairie almost to the mountains. Quite common in Manitoba.

This is one of our largest, most beautiful and most musical birds. The male is unmistakable, his black upper parts, showing flashes of white on back, wings and tail when he flies, and his fiery rose-red breast are marks that will identify him even at a distance. He is a bird of the tall trees, and his loud, ringing song is a musical warble with a quality of tone that suggests the robin. It is sung from the tops of the tallest trees and the singer is restless, moving from tree to tree as though bound that all the world should hear him. By far the most vigorous exhibition of bird music I ever heard was from a rose-breasted grosbeak, a Baltimore oriole and a catbird, each apparently trying to out-do the other. The grosbeak and oriole were in adjoining trees and the catbird in a clump of bushes nearer the ground. The two in the tree-tops seemed to be taking part in a contest where both speed and endurance counted, and the catbird freely imitated each in turn throwing in extras of his own, in volubility being an easy first. I listened for fully an hour in the sunshine of a bright May morning and left with the honours still undecided.

If for no other reason, it is worth while growing trees on the chance, or rather the certainty, that these brilliant singers will be our guests. It is true that there are birds of the open and birds that sing sweetly, but the brilliant performers choose a lofty perch and will be found only among the trees. When every home on the prairie is nestled in woods, which shelter the birds as well as the people, then the prairie will lose its bleakness, the real call of the open country will be felt, and the tinsel and glare of the city will lose its attraction. If we want our young folks to stay on the land, then we must see that they are

surrounded by the natural attractions which the land produces. The greatest of these are trees and birds and running water; even the prairie may have two of these.

Lark Bunting: *Calamospiza melanocorys*.

White-winged Blackbird.

Length: 6 to 7 inches.

Description: Male in summer, black with white wing-coverts forming a patch on each wing; larger wing and tail-feathers sometimes marked with white.

Female and young: Grayish-brown with darker streaks.

Breeding habits: Nest of grass sunk flush with the ground, often under the sage bush. Eggs 4, pale blue, sometimes speckled.

Season and range: A summer resident in south-western Saskatchewan and southern Alberta.

The white-winged blackbird belongs particularly to the dry open prairies, where, along with the chestnut-collared longspur and McCown's longspur, it nests in the dry grass, often concealing the nest beneath the sage bush. Most birds prefer the woods and many have a liking for running water, but nature seldom leaves any part of her domain untenanted, so there are birds for the dry and open prairie as well. For long distances over the plains of south-western Saskatchewan and southern Alberta the lark buntings and longspurs are the only song-birds found. They redeem what would otherwise be desolate to one accustomed to trees and water. Their bright plumage and sweet, somewhat plaintive songs, sung lark-like while soaring, give a touch of life to places that without them would be arid wastes.

In the spring of 1923, Mr. J. S. Charleson saw several of these birds about fifteen miles east of Brandon. Although repeatedly looked for, they have not been seen since. Mr.

Criddle has found this bird apparently nesting in the same locality, and Dr. Speechly has reported seeing it at Pilot Mound.

ADDITIONAL RARER SPECIES

The Indigo Bunting, Lazuli Bunting and Dicksissel are found within the range but are of rare occurrence.

FAMILY TANAGRIDÆ: TANAGERS

A small family of highly-coloured birds, mostly distinguishable from the preceding by a tooth on each side of the upper mandible near the centre, and no downward turn of the line between the mandibles.

They are insectivorous in habit but never numerous.

Western Tanager: *Piranga ludoviciana*.

Crimson-headed Tanager.

Length: About 7 inches.

Description: Male: Middle of the back, wings and tail black, the wings with two white bars and some other white or yellowish markings. Head bright red, extending paler to the breast. All other parts bright yellow.

Female: Olive above and greenish-yellow below. Wings and tail brown, the wings marked with white or yellowish and edged with olive.

Breeding habits: Similar to the scarlet tanager.

Season and range: A summer resident in the Rocky Mountains and extending eastward in wooded regions past Calgary and Edmonton. Rare in western Saskatchewan.

This beautiful bird is most abundant west of the Rockies, but is not at all uncommon in the wooded foot-hills and river valleys farther east. Its colour is so striking that it cannot be mistaken.

Scarlet Tanager: *Piranga erythromelas*.

Length: 6.75 to 7 inches.

Description: Male: Scarlet or crimson with black wings and tail.

Female: Olive green above, greenish-yellow below, the wings and tail darker.

Breeding habits: Nest, a loose structure of twigs and fibres, on the bough of a tree. Eggs 3 to 5, dull greenish-blue spotted with brown.

Season and range: A rare migrant or summer resident in Manitoba and eastern Saskatchewan, most frequently seen in the Red River valley and known to nest about Lake Winnipeg.

This bird is so brilliant that if present it cannot be overlooked, but is not often seen. It has been reported as far west as Qu'Appelle, but seems to be of more frequent occurrence along the Red River.

FAMILY HIRUNDINIDÆ: SWALLOWS

Graceful birds with strong tapering wings, forked tails and weak flat bills.

Purple Martin: *Progne subis*.

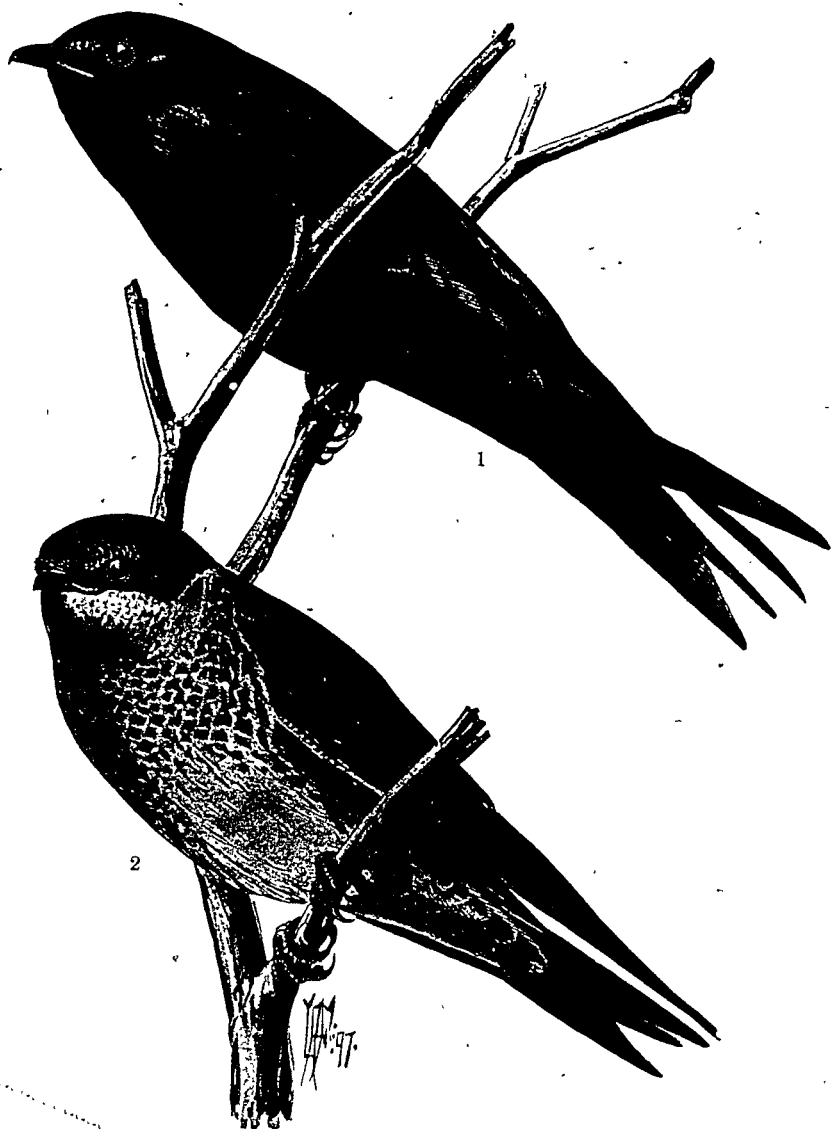
Length: About 7.5 inches.

Description: Body uniformly dark shiny bluish-purple. Wings and tail black. Tail long and forked. Female more brownish above and mottled below passing to whitish towards the tail.

Breeding habits: Nest in hollow trees, but easily adapting itself to nest in buildings or in boxes or houses put up for the purpose. Eggs 4 to 6, glossy white.

Season and range: A summer resident breeding in hollow trees in suitable places across the prairie; nowhere plentiful, but becoming more so in cities where boxes are provided or where other suitable locations are to be found.

The purple martin has always been a very popular bird. This is perhaps partly due to its size and appearance, both



1. Male

2. Female

PURPLE MARTIN

in its favour, but more on account of its social qualities. It is one of the birds that adapts itself readily to nesting places provided by man. It has no objectionable features and so makes a good neighbor. Its food consists entirely of insects and it is neither noisy nor slovenly. Its habit of nesting in colonies and returning year after year to the same location has made it reliable as a guest,—one worth while providing for. Besides this it is strong enough to hold its own with the house sparrow. That little street arab has driven nearly all our desirable birds away from the gardens, but it cannot dislodge a colony of martins.

The martins have always nested in isolated pairs across the prairie, wherever suitable locations could be found. Hollow trees were usually chosen, but in these locations there is little tendency to collect in colonies. They are now becoming more plentiful about the cities, and with encouragement will continue to increase. In Winnipeg the martin is seen now much more frequently than a few years ago, and almost any town has at least a few pairs.

Cliff Swallow: *Petrochelidon lunifrons*.

Length: 5 to 5.5 inches.

Description: Back, crown and a spot on the throat bright steel-blue, that of the head and back separated by a chestnut band. A white or brownish-white crescent on the forehead. Upper tail-coverts and rest of the head and throat, reddish-brown. Wings and tail blackish. Under parts dull grayish-brown, sometimes with a reddish tinge and fading to whitish towards the tail.

Breeding habits: Nests in colonies, made of mud, lined with grass or feathers, and stuck against the face of a cliff or under the eaves of a building. Eggs 4 to 6, white with brown markings.

Season and range: An abundant summer resident across the prairies, nesting under the eaves of barns or against the face of clay banks along the rivers.

Owing to its habit of nesting under the eaves of barns, this swallow has become confused in some people's minds with the barn swallow. Its natural nesting place is against the face of a cliff. On the high clay banks of the Assiniboine river east of Brandon it may yet be seen nesting in this way, and no doubt it does the same in many other places. The side of a barn is to the bird but an artificial cliff, and the projecting eaves afford shelter from the rain. It is therefore no real change of nesting habits to build under the eaves, and it should not for that reason be classed with the barn swallow, which builds inside.

The occurrence of the cliff swallow must of necessity be local, as only a few places offer suitable nesting sites. By using barns, however, it has made its distribution more general, and colonies may now be found around almost all towns and many farm homes. As a close neighbour it is not popular, and considerable pains are often taken to drive a colony away from a building where it has chosen to establish itself.

Barn Swallow: *Hirundo erythrogastra*.

Length: About 6 or 7 inches.

Description: Upper parts shiny steel-blue. Lower parts buff deepening to reddish on the throat and upper breast; the blue of the back extending partly around the neck. Tail long and deeply forked.

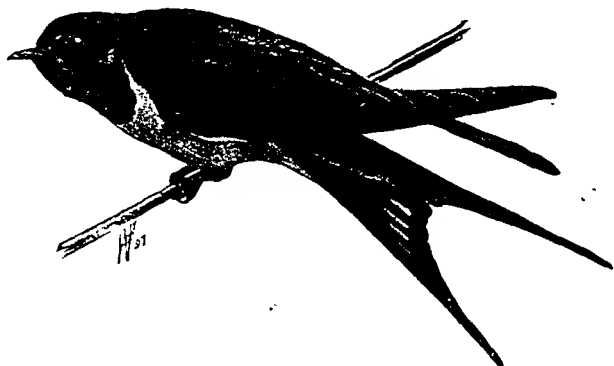
Breeding habits: Nest of mud, lined with straw and feathers, placed on a beam or bracketed against a rafter in an unused building or under a bridge. Eggs 4 to 6, white spotted with various shades of brown. More than one brood to a season.

Season and range: A summer resident, formerly rare but rapidly extending its range and becoming more plentiful.

Not so many years ago the barn swallow was rare in Manitoba, but seems to have been more plentiful farther

west. Coues saw none in the Pembina region in 1873, but noted them at various points farther west almost to the mountains. Seton pronounced them rare in Manitoba but breeding at Qu'Appelle, and Atkinson says he was five years in the province before he collected a single specimen.

They are now quite common throughout the whole prairie region, the range having been greatly extended and the numbers increased during the last ten or fifteen years. I have watched this movement with great interest, showing as



BARN SWALLOW

it does the effect of settlement on the distribution of birds. Formerly few nesting places were available, but, once provided, the birds have not been slow to take advantage of them. Pairs may now be found under almost any bridge, or in barns or skating rinks.

It is easy to distinguish the barn swallow from any other by its reddish throat and long forked tail. They are not popular tenants, but when we remember that all swallows live entirely on insects, we should forgive them the litter they are liable to leave in any building they occupy.

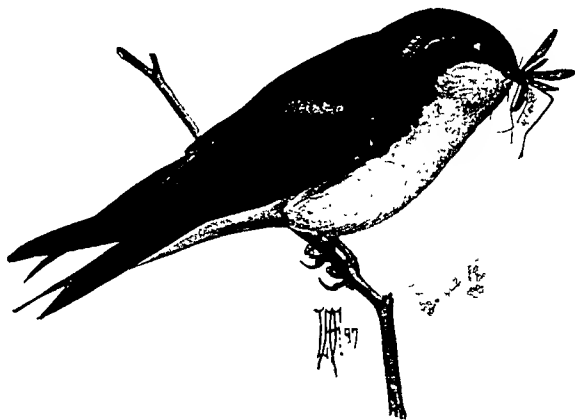
Tree Swallow: *Iridoprocne bicolor*.

Length: About 6 inches.

Description: Whole upper parts iridescent green. Wings and tail dull black. Lower parts white. The female rather duller than the male.

Breeding habits: Nest in holes in trees, in colonies if there are sufficient places for nesting. Eggs about 6, pure white.

Season and range: An abundant summer resident across the prairie, nesting wherever there are trees and generally near water.



TREE SWALLOW

If you know the swallows, it is easy to tell the tree swallow from the others. This is the only one found on the prairie with lower parts pure white. As far as my own experience goes it seems to be the most abundant, and one wonders where it finds trees enough with holes to accommodate it. I have never seen it in a colony but occasionally find a pair occupying a deserted flicker's nest. In fact I

have never seen a place where there could be a colony. Seton speaks of the largest colony he has ever seen consisting of about twenty pairs. This would be small compared with some colonies of cliff swallows.

Like most swallows this one is not slow to take advantage of any nesting places provided by man. This summer a pair occupied an iron tube which had been driven into the sand in shallow water on the edge of Lake Manitoba, as a mooring-place for boats. Neither wind nor water seemed to disturb them.

In late summer after the young are able to fly, they collect in immense numbers about bodies of water, particularly in marshy places where insects are plentiful. There they circle and dart about all day, gleaned their food from the air above the water, or at times resting on wire fences or telephone wires or anything that furnishes sufficient perching space. I have seen half a mile of telephone wire so thickly lined that it seemed as if there was scarcely a foot without a swallow, and in places more than one to a foot. They must gather from long distances to these stretches of marsh and water where insects abound.

Often in the late evening I have sat in the canoe with the fish-pole lying over the side, and watched these birds feeding. In hundreds they would dart and circle over the water, their lines of flight crossing and recrossing in endless confusion. All the time the gentle tip of their jaws could be heard as they picked the flies out of the air or off the surface of the water,—a very different sound from the savage *click* of the flycatcher's bill.

Bank Swallow: *Riparia riparia*.

Length: About 5 inches.

Description: Upper parts dull brown, more reddish on the wings

and tail. Lower parts white with a dark band across the breast.

Breeding habits: Nests in holes in clay banks. Eggs 3, pure white.

Season and range: An abundant summer resident on the prairie, nesting in holes in railway embankments, river banks or even boring into the sides of deserted cellars.

The bank swallow is the least beautiful of the race. You see no gleam of green or purple reflected from its dull brown back. Its distinguishing mark is the dark band across the breast, the rest of the lower parts being pure white. Its holes, bored in clay banks, are very common,—no suitable location is without them. In fact, it is one of our commonest birds.

FAMILY BOMBYCILLIDÆ: WAXWINGS

Head bearing a prominent crest; wing quills tipped with red, resembling sealing wax.

A small family of woodland birds of gentle habits and exquisitely tinted, though modest colouring.

Bohemian Waxwing: *Bombycilla garrula*.

Length: 7 to 8 inches.

Description: Pure ash-gray on the tail and lower back, this gradually changing toward the head to a rich orange-brown. A narrow line across the forehead, a line through the eye, and the chin and throat jet black and sharply defined. Under tail-coverts bright chestnut-brown, the rest of the under parts gray tinged with brown. Tail darkening to black toward the end, and each feather tipped with yellow. Wings blackish, the primaries with a white or yellow tip on the outer webs which join to make a narrow stripe lengthwise on the wing when folded; secondaries tipped with white; the shafts ending in red wax-like extensions; some white tips on the wing-coverts. Bill dark. Feet black.

Breeding habits: Like that of the cedar waxwing, but the eggs larger.

Season and range: An irregular winter visitor on the prairies.

These beautiful birds may appear at any time during the winter, and be found feeding on the berries of the mountain ash, high-bush cranberry or any other fruit remaining on the trees. They have the same refined appearance as the cedar waxwing and the same soft notes, appearing, while feeding, to converse in an undertone. Their appearance is very irregular but a flock may stay around the same locality for some time. Once gone, however, the bird may not be seen there again for years.

When someone reports having seen a flock of cedar birds in winter there can be no doubt as to what he saw. The time of appearing is alone sufficient to distinguish the two species, as their seasons never overlap.

Cedar Waxwing: *Bombycilla cedrorum*.

Cedar Bird.

Length: 6.5 to 7.25 inches.

Description: Upper parts shading from a pure ashy-gray through olive to a sort of purplish-brown on the head. On the lower parts these colours shade into yellowish and then white on the under tail-coverts. There is no clear dividing line between the different shades and the whole has a silky lustre. Crest fairly prominent. Black markings about the head similar to the preceding but the black of the throat shading into the colour of the breast. A white line on the lower jaw. Tail tipped with yellow. Some of the wing-coverts marked with white and the secondaries tipped with red wax-like points.

Breeding habits: Nest of twigs and grass in a shrub or low tree. Eggs 3 to 6, bluish sharply marked with dark spots.

Season and range: A summer resident nesting very late, often



CEDAR WAXWING

not before July. Common in wooded regions across the plains.

The cedar bird is, perhaps, the most refined in both appearance and habits of all our feathered visitors. Even the dainty goldfinch is hardly its equal. No one has ever seen it with its faultless plumage awry, nor heard it even utter a note that betokened anything but good will. It is also very

social in habits and moves about in small flocks almost all summer, only a short time in midsummer being devoted to the rearing of young. Its habit of late nesting relieves it of the danger of having its eggs eaten by other birds, as other food is plentiful by the time its nest is built. Perhaps this is one reason it seems to have no tendency to fight. It has never suffered injury from other birds and so does not suspect any evil designs.

While not silent its voice is not penetrating, and its thin, almost whispering note attracts but little attention. To those who know it, however, it is familiar and may be heard from the tree tops of almost any grove or from the small flocks passing overhead.

In colour it is as modest as in voice, but can display a beauty of shading and delicacy of tint that many more brilliant birds lack. Altogether it is a most welcome visitor and is absolutely without guile. All nature seems to respect this gentle bird, as I have never known either boys or cats to molest it and never found one dead as the result of any violence. Its lot seems to be a pleasant one.

FAMILY LANIIDÆ: SHRIKES.

Fairly large birds prominently marked with black and white, and having strong bills with a strong hook at the point,

Northern Shrike: *Lanius borealis*.

Butcher Bird.

Length: 9 to 10.5 inches.

Description: Upper parts a sort of bluish-gray, darkest on the back. Lower parts lighter, with darker wavy markings on the breast and sides. Wings and tail black with prominent white markings. A black bar on each side of the head



NORTHERN SHRIKE

running backward from the eye. Bill dark, strong and hooked at the point. Feet bluish-black.

Breeding habits: Nest of sticks, grass and fibres, in a low bush. Eggs 4 to 6, grayish or greenish with clouding of brown or purple.

Season and range: A regular but not abundant resident or winter visitor, nesting quite commonly along the Saskatchewan river about the northern limit of the prairie, and from that north to about latitude 60 degrees. Farther south mostly a winter visitor.

The shrikes are birds that are changing their mode of life and passing from insect eaters to birds of prey. They have all the characteristics of song birds, even to the song, and to some extent the taste of the hawks and owls. Even the shape of the bill shows this change and has acquired a hook at the point. For this reason they are far from popular, and the largest and fiercest of the race is the great northern shrike or butcher bird.

Its habit of killing small birds and impaling them on thorns or twigs is well known, and is performed with a skill that denotes long practice. Fortunately, with us this bird is not very common and visits us when small birds are not plentiful, but it no doubt does great harm in the localities where it nests.

White-rumped Shrike: *Lanius ludovicianus*.

Length: 9 inches.

Description: Above, not including wings and tail, light slaty-gray, with the upper tail-coverts and some feathers at the base of the wing white. Below white, slightly shaded with gray on the sides; a black very narrow stripe across the forehead, broader as it runs backward along each side of the head and including the eye; wings and tail black with white markings. Bill and feet black, the bill strongly hooked.

Breeding habits: Nest in low tree or shrub, of bark and other fibres, resting on a base of interlocked twigs. Eggs like those of the preceding but smaller.

Season and range: A summer resident from middle of May to September across western North America, north to latitude 54 degrees.

This is the common shrike of the prairie provinces, especially in summer. While never plentiful, isolated pairs may be found nesting almost anywhere across the three provinces where groves or thickets afford, not only a suitable nesting site, but shelter for the smaller birds, mice and insects on which it feeds.

Its habits are similar to those of its larger relative, but in spite of its hawk-like character, it does not always succeed in frightening the smaller birds.

Some years ago I was watching a nest which a pair of these shrikes had built in the grounds of the Normal School at Manitou. It was in a box-elder tree about six feet from the ground and was carefully watched by the birds. After the eggs were laid, and in spite of their vigilance, the nest was rifled by the house sparrows. The sparrows had been in the vicinity in considerable numbers for days, and no doubt took advantage of the first opportunity to pay off some old debt, as only a few days previous the wing of a sparrow was found impaled on the thorn of a hawthorn bush. The shrikes, yielding to force of numbers, left the locality.

I have never heard the northern shrike sing, but have frequently heard this bird. Its song is not very musical, but would pass as a fairly good attempt in a bird of more commendable habits. It does not go far in redeeming the character of a murderer.

FAMILY VIREONIDÆ: VIREOS

Small, modestly coloured, insect-eating birds with slightly hooked bills.

Red-eyed Vireo: *Vireosylva olivacea*.

Length: 5.75 to 6.25 inches.

Description: Upper parts olive green. Lower parts whitish shading to greenish-yellow on the sides. Crown gray with a dark line on each side and a whitish line over the eye, and below that a dark line through the eye. Eyes red.

Breeding habits: Nest a frail structure of woven fibres and other material, suspended in the fork of a swaying branch, generally not more than 10 feet from the ground. Eggs 3 to 5, white with brown specks towards the larger end.

Season and range: A common summer resident in wooded districts across the whole prairie region.

The vireos should be known as a class before any attempt is made to distinguish the different kinds. They are small birds of plain colouring and belong essentially to the tree-tops. Their general colour is olive above and whitish beneath, with or without a show of yellow. Being insect eaters they are restless, hopping from bough to bough in search of food after the manner of the warblers, but may be distinguished from these by their more slender shape and stouter bill with a hook at the point. The bill is a miniature of the shrike's. Their feet, too, are peculiar, the toes being run together at the base. There is scarcely any difference of colouring to mark the sexes.

The red-eyed is no doubt the most plentiful vireo in the prairie region, but it likes the woods and seldom frequents the trees in town except during migration. On the narrow strip of wooded beach at the south end of Lake Manitoba, I have seen only three of these birds in ten years. One I found dead during the spring migration, and the



RED-EYED VIREO

other two built nests within a few feet of the cottages. One nest was unfortunately destroyed in a wind storm and the other was robbed by the grackles.

The bird is best distinguished by the light line over the eye bordered by a black line above, and by its song. It is a most incessant singer, and the song is so monotonous and repeated so continuously that it becomes tiresome. It consists of a series of three or four notes uttered in about the same key or with a rising inflection, and repeated three or four times with short intervals between. "You see it—you know it—do you hear me? do you believe me?" is the way an American writer, Wilson Flagg, interprets it, and it is better than many interpretations of bird songs. The red eye, which gives the bird its name, is not easily seen in living birds and soon fades in dead specimens.

Warbling Vireo: *Vireosylva gilva*.

Length: 5.5 to 6 inches.

Description: Almost exactly like the preceding except that it is white beneath with possibly a shade of yellowish. It has a very short or spurious quill on the front of the wing, which, with the lack of yellow on the under parts, is about its only difference from the Philadelphia, and that can best be seen with the specimen in the hand.

Breeding habits: Nest of bark and fibres, suspended in the fork of a bough of a tall tree.

Season and range: A very common summer resident in all wooded districts in Manitoba; less common farther west. More a bird of groves and borders of woodland than of the deep woods.

This, next to the red-eyed, is the most abundant vireo in the west. It is even more universal in its distribution than the red-eyed, and frequents the trees in towns as freely as the woodland groves. The presence of man does not dismay it and its song can always be relied upon. It is a long, rich warble, ending suddenly and with a rising inflection, and is sung with a persistence equalled only by the red-eyed. Its plain colouring makes it scarcely ever noticed except for its song, and with many people song and bird are never connected.

I have lived every summer for about ten years as its close neighbour, and no bird has contributed so continuously to the music in the groves. Its song has not the strength of the oriole's, nor the sweetness of tone of the song sparrow's, but it has a satisfying quality which seems as though the bird itself was pleased and wanted to please others. It sings as, unseen, it gathers its dinner of small insects from among the upper branches of the tallest trees, and seems merely a melodious voice shifting from place to place and without any visible source. We never tire of

the rich warble of this bird as we do of the monotonous declamation of the red-eyed.

The nest is a well-woven cup hanging in the fork of a swaying bough, well up in the tree-tops. While not often quite as high up as the oriole's nest, it resembles it in location more than the other vireos. The four or five whitish eggs speckled with brown resemble those of all the other members of its race.

Towards the western limit of the range this bird is paler in colour and is regarded as a sub-species, but the difference is very slight.

FAMILY MNIOTILTIDÆ: WOOD WARBLERS

*Small, energetic, insect-eating birds of the woods or shrub-
beries, with straight, slender bills.*

The wood warblers as a class are the most striking of our small migrating birds. They are called wood warblers to distinguish them from the "old world" or European warblers, which are more like our kinglets. These are all small birds and often bright-coloured. They come in large numbers, many different kinds in mixed flocks, and by their numbers and colours attract a great deal of attention. They are entirely insect-eating, unless in the spring when they may have to live for awhile on small seeds. During migration they pick their living from the ground, but in summer they are mostly birds of the trees. A few, however, continue to live on the ground but still live on insects.

Only a few of these gay and sprightly little birds nest with us, and then mostly in retired places, so that it is only during the migration they are much seen. In the fall they have lost their bright colours, so anyone wishing to know all the warblers which visit us must study them in the spring migrations.

The good which these birds do is almost overlooked. All summer in the depths of the forest they are constantly searching the tree tops for insects. To watch one for even a few minutes will show how thorough and effective this search is, and when we think that countless thousands are doing this work every year, we may begin to realize their service in protecting the forest trees from insects. A few, that do not visit the tops of the trees, carry on the work on the ground or among the lower bushes, and one species has taken upon itself to explore the trunk. Every crevice in the bark is carefully examined, and concealed insects or insect eggs furnish its diet. But for the protection furnished by these and other birds of similar habits, our forests would perish from insect attacks.

Black and White Warbler: *Mniotilta varia*.

Black and White Creeper.

Length: About 5 inches.

Description: Upper parts striped black and white. A white stripe on the centre of the crown, a black stripe on each side of this, and a white stripe on each side below the black. Lower parts white in the centre, but striped on the sides. Wings and tail black or brown with some white edgings. Two white wing-bars. Bill and feet black. The female somewhat duller than the male.

Breeding habits: Nest of grass or leaves, on the ground or near it. Eggs 4 or 5, white with reddish-brown spots.

Season and range: A summer resident or migrant across the prairies but more plentiful in Manitoba than farther west.

This warbler, from its habit of creeping about on the tree trunks, is often called a "creeper". It comes in early May, among the first of the warbler migrations, and is quite conspicuous on the tree trunks before the leaves are out. Soon it disappears, either farther north or to the

depths of the wooded places to nest. Its nest is hard to find, and is either on the ground or on some stump or root very near it. In August it makes its appearance again, the first sign of the return migration. It is almost silent,



BLACK AND WHITE WARBLER

a soft almost tremulous *see-see-see* being its only note. Watch two or three of these birds searching for concealed insect eggs or larvae in May, and try to think how many insects they prevent from infesting the trees during the summer.

Nashville Warbler: *Vermivora rubricapilla*.

Length: About 5 inches.

Description: Upper parts olive green, paler on the back. Wings and tail brownish with no wing-bars. Head and neck gray with a spot of dull chestnut on the crown. Lower parts clear yellow. Bill and feet dark. Female much duller than the male.

Breeding habits: Nest of moss and grass, with a lining of softer material, and placed on the ground in a mossy bank. Eggs mostly 4, bluish-white speckled with brown.

Season and range: A rare migrant or summer resident in Manitoba, doubtful farther west.

This brilliant warbler is only rarely met with in eastern Manitoba. It is occasionally seen in the spring and fall migration and more rarely in secluded districts during the summer. This indicates that it sometimes nests in the province, but there is only one record of its nest being found. This was taken by Mr. Raine at the south end of Lake Manitoba in 1894. "The nest was built at the side of a mossy knoll in a bluff." It is a shy bird, keeping to the woods and thickets, and may possibly be more regular in its visits than the records show.

Orange-crowned Warbler: *Vermivora celata*.

Length: 4.8 to 5.2 inches.

Description: Upper parts olive, grayish toward the head, more yellowish toward the tail. Lower parts greenish-yellow with a streaky grayish tinge, palest on the belly and throat, more olive toward the sides. Under sides of the wings and the inner edges of tail-feathers whitish. A yellowish ring around the eye and a partially concealed orange-brown patch on the crown. This crown patch is smaller and more obscured in the female and usually absent in the young.

Breeding habits: Nest of dry grass and moss, lined with finer grass or hair, sunken in the ground or concealed under grass or other plants. Eggs 4 or 5, white, thickly marked toward the larger end with gray or reddish spots.

Season and range: A summer resident or migrant across the prairies.

This bird, although a summer resident breeding in secluded wooded places all across the prairies, is most often seen during the spring migration. This migration seems to be chiefly up the valley of the Mississippi and continues so far north that the bird has been found breeding within the Arctic circle. It is seldom seen at this time along the Atlantic coast, but is not uncommon there on the return trip in the fall.

The birds reach us with the general warbler migration about the middle of May, stay around a few days and then disappear, some retiring to the wooded ravines to nest, the others continuing their journey to the far north. Their song is heard only during the mating and breeding season and even then is not striking, being only a few rather sweet trills with an abrupt ending. They have a rather sharp chipping call-note, which they use persistently when moving about in search of food.

Tennessee Warbler: *Vermivora peregrina*.

Length: 4.5 to 4.75 inches.

Description: Upper parts yellowish-olive, brighter towards the tail and changing to pure ashy gray on head and neck. Eye ring, and often stripe over the eye, whitish. Under parts dull white or tinged with yellowish-green in the female, wings and tail dusky, edged with olive green. Closely resembling the orange-crowned but without the crown patch.

Breeding habits: Nest a loose structure of leaves and moss, placed on the ground and concealed by grass. Eggs 4,

creamy-white, finely spotted all over with brown, larger brown spots towards the large end.

Season and range: An abundant migrant or summer resident.

This is one of the most plentiful of the warblers during migration throughout the prairie provinces. It arrives during the latter half of May and is often very plentiful in groves and thickets and even along the streets. It is distinguished from the preceding by the lack of a crown patch. It not infrequently sings during migration, and the song is so striking as to attract attention. Seton says: "Its song begins with a note like *chipiti-chipiti* repeated a dozen or more times, with increasing rapidity, then suddenly changes into a mere twitter."

Although so common during migration, little is known of the nesting habits of this bird. That it nests throughout a great part of its range is agreed, but few nests have been found. This is no doubt due more to the bird's skill in concealment than to rareness of the species.

Cape May Warbler: *Dendroica tigrina*.

Length: 5 to 5.5 inches.

Description: Male in spring, back yellowish-olive with black spots; crown black in good plumage but often spotted with olive. Rump, sides of neck, sides of head and entire under parts bright yellow, almost meeting across the back of the neck. Breast and sides thickly streaked with black. The throat often tinged with brown and the belly and lower tail-coverts light. An orange-brown patch around the eye, with a black horizontal bar running through it on a level with the eye.

Female in spring: Similar but paler and lacking the markings on the head.

Young and adults in the fall: Dull olive green with lighter under parts.

Breeding habits: Nest roughly made, in a low bush. Not many known. Eggs 4, ashy-white.

Season and range: An abundant migrant in Manitoba becoming less plentiful farther west.

The Cape May is usually reported to be rare, as it is seldom seen in the eastern coast States. In Manitoba, however, it is a common migrant, often occurring in large numbers, and has been reported as far west as Medicine Hat. It seems to nest along the Red River and eastward, but has not been reported breeding farther west.

This is one of the most beautiful of the warblers, somewhat resembling the Magnolia but not so bright, and occurring with the latter during migration.

Yellow Warbler: *Dendroica aestiva*.

Length: 4.75 to 5 inches.

Description: Male: Bright golden yellow with a slight greenish tinge above, the back often with obscure dark streaks. Wings and tail darker. Breast and sides, or sometimes the whole under parts streaked with orange-brown. Bill leaden gray. Feet pale brown.

Female: Yellowish-olive above and more yellowish beneath, the streaks of the breast obscure. The whole colouring paler than the male, and the young similar, but still paler.

Breeding habits: Nest a well woven cup of grass and fibres, lined with down and placed in a low bush. Eggs 4 or 5, grayish or greenish-white variously spotted with reddish-brown.

Season and range: A very common summer resident across the whole range.

The yellow warbler is one of our commonest summer birds and by far the best known of all the warblers. It comes in May and may be seen flitting from branch to branch



YELLOW WARBLER

through the shrubberies all summer. It prefers the bushes and low trees to the lofty tops, but is not strictly a bird of the ground.

Its nest is very neat and dainty, as is everything about this bird, and may be found in the shrubberies around the city gardens. Every year we have them in the Normal School grounds, nesting in the honeysuckles and lilacs, the bright golden yellow of the male rivalling in brightness a head of golden glow.

The most unattractive thing about this bird is its song. It is more a shrill chatter than a warble, and is uttered with the greatest gusto from the depths of some clump of foliage. Without seeing the singer, one would never connect the song with this dainty bird.

I know of no bird that is so often imposed upon by the cowbird as this warbler. It is the exception to see a nest escape having at least one of these eggs intruded. Sometimes the warbler builds a second or even a third nest over the cowbird's egg, but more often the imposition does not seem to be detected, and the little warbler may often be seen feeding the greedy young imposter much bigger than herself. The young warblers, if hatched, seem to be crowded out or starved by the intruder.

Myrtle Warbler: *Dendroica coronata*.

Length: About 5.5 inches.

Description: Male: Upper parts bluish-gray streaked with black. Breast and sides mostly black but mixed with white. Throat and belly pure white. Crown, rump and sides of the breast, bright yellow. White wing-bars and white spots on the inner webs of the outer tail-feathers. Bill and feet black.

Female, young and male in the fall: Similar but duller, and shading to brown instead of gray. Always the yellow on the rump and at least traces of the other yellow spots.

Breeding habits: Nest and eggs much like the preceding, but often in evergreen shrubs.

Season and range: An abundant migrant across the prairies, and in places a summer resident.

The myrtle is one of the commonest of the warblers during migration, and, next to the yellow, is the most easily identified. It is an ashy gray bird, smaller than a sparrow, more or less streaked with black. Its distinctive markings are four yellow spots, one on the back just above the tail,



MYRTLE WARBLER

and visible when the bird flies, one on the crown, and one on each side of the breast. These are quite bright and form a positive mark for identifying the male in the spring. The female and the male in fall plumage show only the yellow mark on the back, the mark on the head, if present, being more or less concealed, and the other marks absent. The young resemble the female or the male in fall plumage.

This is the first warbler to arrive in the spring. It reaches southern and eastern Manitoba about April 20th and remains about a month, when it passes on to more secluded northern districts where it nests. Farther north and west the migration is a few days later, and in places an occasional pair may stay all summer.

It is a sociable little bird, flocking around the streets and gardens, but on the whole is rather silent. Its chief note is a rather feeble "chip", and its song, when heard, is not impressive.

The fall migration is in September, although a few stragglers may stay until early October.

Magnolia Warbler: *Dendroica magnolia*.

Length: 4.75 to 5 inches.

Description: Back black, pure and unbroken in the male, often mixed with olive in the female. Rump yellow. Upper tail-coverts black or mixed with gray. Crown gray. Sides of the head black joined by a narrow stripe across the forehead, with a white stripe from the eye back separating this black from the gray crown. Under parts, except the region near the tail, bright yellow streaked with black on the breast, the black streaks almost uniting to form a black bar across the front of the neck. Throat pure yellow. Wings dark brownish lined with white, white edgings on some of the feathers and a large white patch. Tail blackish with white patches on the middle of the inner webs of all the feathers except the middle pair, forming a broad, interrupted white bar across the underside of the tail about the middle.

The young are similar to the adult, but much duller and with two white bars instead of a white patch on the wings. Adults in the fall similar to the young.

Breeding habits: Nest in conifers, at different heights from the ground. Eggs 4 or 5, variously marked.

Season and range: A common migrant in Manitoba and somewhat less abundant farther west. Nesting in the spruce woods along the northern limit of the prairie.

This is one of the most brightly coloured of all the warblers. In the mixed flocks of the spring migrations it is the one most frequently noticed. People very frequently inquire what that bright-coloured bird is, and many almost weird descriptions are given of its peculiar markings. In the fall it is more soberly clad, but may still be recognized by anyone who learns to know it in the spring. It is not known to nest south of the spruce forests, but isolated pairs may occasionally do so.

Chestnut-sided Warbler: *Dendroica pennsylvanica*.

Length: About 5 inches.

Description: Male: Back streaked with black and yellowish or grayish-white. Wings dark, with some yellow markings and two white bars, or the two fused in one white patch. Two outer tail-feathers spotted with white on the inner webs. Crown yellow obscurely bordered on each side with white, this bordered below with black, which reaches down to and almost encloses the eye where it divides, one point running back and losing itself on the neck, the other running downward and backward into a streaky chestnut stripe that runs along the whole side of the body. Sides of the head and neck, except for the black about the eye, white. Whole under parts white. Bill blackish. Feet brown.

Female: Similar but duller, with obscure head markings, and sides merely spotted with chestnut.

Young: Upper parts yellowish-green. Lower parts pure white. Sometimes traces of the chestnut streaks.

Breeding habits: Nest rather poorly made, in bushes or low trees. Eggs 4 or 5, white spotted with reddish, the spots sometimes in streaks.

Season and range: A common migrant or rarely a summer resident in Manitoba but not found much farther west.

This well marked and striking warbler is very abundant farther west and a fairly common migrant in Manitoba, but very few stay to nest. It frequents rather open woods and stays largely in the tree-tops, so that it is seldom seen except in migration. During the spring migration it may be seen regularly in the trees along the city streets.

Bay-breasted Warbler: *Dendroica castanea*.

Length: A little less than 6 inches.

Description: Male: Back grayish-olive and black thickly streaked. Wings and tail dark, two white wing-bars and white spots on the inner webs of the two outer tail-feathers. Forehead and sides of the head black. Top of the head deep chestnut. Chin and throat dull chestnut, which runs with some interruptions down the breast and along the entire sides of the body. A buffy patch back of the eyes. Under parts whitish or buff.

Female: More olive than the male and the chestnut markings less distinct. In fall the markings are obscured in both sexes but some chestnut persists.

Young: Greenish-olive above, slightly streaked with darker. Below yellowish-green.

Breeding habits: Nest of twigs, moss, rootlets and hair, well up in a tree. Eggs 3 to 6, bluish-green thickly spotted with various shades of brown.

Season and range: A plentiful migrant in Manitoba and nesting sparingly in suitable places. Rare farther west.

The bay-breasted occurs quite commonly along with the other warblers during the migrations in Manitoba. I have seen them in considerable numbers in the spring in the park and back yards in Portage la Prairie and less numerous in Brandon. They seem to decrease in numbers going west. The farthest west from which any have been re-

ported is Medicine Hat. Very few of them stay to nest in the southern part of the province, but an occasional pair may be seen in wooded districts during the summer.

Black-poll Warbler: *Dendroica striata*.

Length: About 5.5 inches.

Description: Male: Back and upper tail-coverts grayish-olive thickly streaked with black. Wings dark, the primaries edged with greenish and two white bars. Tail dark with small white spots on the inner webs of some of the outer feathers. Crown glossy black. Lower parts, including the sides of the head up to the eye, white except for a row of black streaks on each side from the chin backwards along the sides to the tail, the streaks closer together near the head than farther back. Upper mandible brownish-black. Lower mandible and feet flesh-coloured.

Female: Whole upper parts, including the head, greenish-olive with dark streaks. Lower parts white tinged with greenish-yellow, the streaks along the side more dull than in the male. Wing-bars and edgings of the wings greenish-white.

Young: As in the female.

Breeding habits: Nest much as in the preceding, but placed near the ground or on it. Eggs about 5, white or cream-coloured variously spotted with brown.

Season and range: A fairly common migrant across the prairies and breeding in the spruce woods in western Alberta and in the wooded belt north of the prairie.

What has been said about the two preceding species may also be said about the black-poll. It occurs in the migrations and is more plentiful in Manitoba than farther west. It is in some ways more active than the others and has a habit of catching insects on wing, which is not unlike the method of the flycatchers. It breeds in the conifer forests of the Rocky Mountains as well as north of the prairie

region, but is not reported as nesting in any of the wooded belts of the prairie.

Blackburnian Warbler: *Dendroica fusca*.

Length: About 5.5 inches.

Description: Male: Upper parts, including the wings and tail, black, the wings with a white patch and white edgings, and the back slightly marked with white; the three outer tail-feathers mostly white. Under parts from the breast backward white, more or less streaked with black and tinged with yellowish. Spot on the front of the crown, a line over the eye which spreads downward into a large patch behind the ears, chin, throat and upper breast, all an intense shade of orange, the brightest bit of colour in any warbler. A black patch below and behind the eye, generally running down into the black streaks of the lower parts. Bill and feet dark.

Female: Similar in markings, but the black of the upper parts replaced by brownish-olive streaked with black, and the orange colour reduced to dull yellow, or that of the crown lacking. Two wing-bars instead of a large white patch.

In fall the male has lost the fiery colour and the sexes resemble each other, the markings of the spring retained but the tones much duller.

Young: Brownish-olive above and white tinged with yellow below. There may or may not be traces of the markings of the adult.

Breeding habits: Nest in trees and bushes. Eggs 4 to 6, bluish or greenish-white marked with brown.

Season and range: A fairly common migrant in Manitoba, not so common farther west. Never plentiful.

The orange about the head and breast of the Blackburnian is one of the brightest bits of colour in all bird life. It is almost startling in its bold contrast to the colours around it. This marks the bird at once, but we do not see

many in spring and in fall they are not easily distinguished from many others.

Pine Warbler: *Dendroica vigorsi*.

Length: 5.5 to 6 inches.

Description: Male: Upper parts uniform yellowish-olive. Lower parts yellow, getting paler and sometimes obscurely streaked towards the tail. A yellow line over the eye. Two white wing-bars. Two outer tail-feathers spotted with white.

Female and young: Similar but duller, more gray above and soiled white beneath. Male in fall plumage resembling the female and young.

Breeding habits: Nest of bark, weeds, hair and down, and placed on the bough of a pine tree at different heights. Eggs 4, or more rarely 5, white, grayish or bluish, variously marked with different shades of brown, lilac or blackish.

Season and range: A summer resident somewhat common locally in Manitoba where nesting sites are suitable. A rare migrant farther west but nesting north of the prairie.

This is a rather dull-coloured and slow-moving bird and one of the largest of the warblers, being about the size of the myrtle. It is said to keep very close to the pines in its regular nesting regions, but in migrations it leaves these trees, and with us it probably nests among the spruces.

Although it is generally recognized as one of our most vigorous warblers, its specific name "*vigorsi*" has nothing to do with its vigor. The bird was named in honour of the English naturalist, N. A. Vigors.

Palm Warbler: *Dendroica palmarum*.

Length: 5 to 5.25 inches.

Description: Male: Upper parts olive-brown, the back with obscure dark streaks, yellowish towards the tail. Line above the eye and under parts yellow with brown streaks on

breast and side. The two outer tail-feathers on each side with a white spot at the end of the inner web. Crown chestnut. Under tail-coverts yellow. Young, brownish above and dusky or yellowish-white beneath.

Female: Upper parts olive-gray, yellowish towards the tail; under parts yellowish-white, streaked with brown across the breast; under tail-coverts yellow. A light streak over the eye.

Breeding habits: Nest on the ground. Eggs creamy-white, spotted with purple about the larger end.

Season and range: A rather common migrant in Manitoba but less plentiful farther west, nesting from Hudson Bay to Great Slave Lake.

Although its name signifies "of the palms", the palm warbler seeks the pines and firs of the north as its nesting place. It is only in its migrations that it is well known and but few of its nests have ever been discovered. It is essentially a bird of the ground, and the only one of its genus which visits us that nests on the ground.

In habits it does not resemble the other warblers and has a peculiar way of wagging its tail not unlike the pipit.

Oven-bird: *Seiurus aurocapillus*.

Length: 5.75 to 6.5 inches.

Description: Whole upper parts, including the wings and tail, uniform olive-brown. Crown golden-brown bordered on each side by a black line. A white ring around the eye. Under parts white, spotted on the breast and streaked on the sides with dark. Scarcely any variation of colour for differences of season, age or sex.

Breeding habits: Nest of leaves and grass, on the ground and closed over on the top, with an opening in the side to allow the bird to enter. Eggs 4 to 6, white or cream and speckled with brown.

Season and range: A common summer resident in wooded places across the whole prairie region.



OVEN-BIRD

The oven-bird is more a bird of the ground than of the trees. In fact, it resembles the thrushes in many ways more than the warblers, and in places is known as the "golden-crowned thrush." The name "oven-bird" it gets from its peculiar covered nest. If you go into the woods, somewhere not far from a stream of water and sit down, the oven-bird may come. It is a small brown bird and comes rustling through the leaves attracting little attention. It needs to be close before you can be sure of it by its dull orange crown, white ring about the eye and speckled breast. If you do not see it, you may hear it. Its voice is much more striking than its appearance, and you are much more likely to hear it than see it. The song, if such it may be called, is a repetition of two syllables in a shrill tone and uttered with a rising inflection. It has by general consent been interpreted as *teacher, teacher, teacher*, and may be

heard ringing from the low trees, while the bird itself is concealed by the foliage. This bird comes to us about the middle of May and is commonly seen about the shrubberies in towns for some time, while its shrill voice may be heard even from the trees along the streets.

Water Thrush: *Seiurus noveboracensis*.

Length: 5 to 6 inches.

Description: Above, uniform dark olive green, including wings and tail. Below, pale sulphur yellow speckled or streaked with brown, the markings smallest on the throat, a whitish line over the eye.

Breeding habits: Nest in nooks and cavities on the ground, in woods near water. Eggs 4 or 5, creamy-white spotted with brown.

Season and range: A common summer resident along the streams throughout the whole region.

The water thrush is a solitary bird, seeking the depths of the woods provided a stream is there. It seldom comes into the towns and to see it we must visit its haunts. If you really want to see it, sit down by the side of a woodland stream and wait. It will come bobbing along at the water's edge. Then if you would know it the better, follow it, keep it in view, see what it does and where it goes. By the time you have done this you will have had a fairly busy half day. Perhaps it may show you its nest hidden in a cavity under an upturned root or some similar nook, and not far from the water, possibly with the water flowing all around it. Or perchance you may hear it sing. The song is sweet, but not penetrating, in keeping with the surroundings, and not at all resembling the shrill ringing notes of the oven-bird. But if you do not care for a long tramp in wet and tangled places, then you need not seek really, to know the water thrush.

Connecticut Warbler: *Oporornis agilis*.

Length: 5 inches.

Description: Male: Above, olive green becoming ashy gray on the head. Below, from breast backwards yellow, shaded with olive on the sides. Throat and breast ashy gray, almost black in spring. A white ring around the eye. Wings and tail shaded with olive.

Female: Resembling the male but the head more olive and the throat and breast lighter.

Young: Resembling the female, but more dingy.

Breeding habits: Very few nests have been found. One reported by Seton from near Carberry, Manitoba, was in a tamarack swamp, on the ground, "composed entirely of fine grass." Eggs 4, a "delicate creamy white, with a few spots of lilac-purple, brown and black, inclined to form a ring at the large end."

Season and range: A rare migrant or summer resident in Manitoba and more rare westward.

This warbler is a regular, but not plentiful, migrant and summer resident in Manitoba, breeding in tamarack swamps, particularly in the northern part of the province. It is reported by Atkinson as far west as Battle River, Alberta, in 1896. Its song is described by Seton as "like the song of the oven-bird but differs in being in the same pitch throughout." The song, however, is variable and the bird has a call-note which is a sharp *peek*.

Mourning Warbler: *Oporornis philadelphia*.

Length: 5.25 to 5.5 inches.

Description: Upper parts bright olive passing to ashy gray on the head. In best plumage the breast and throat of the male is black, but usually gray with traces of black. The feathers are in fact black tipped with gray, giving a peculiar crêpe-like appearance which accounts for the name. Wings and tail without markings. Under parts

clear yellow. No white about the eye. Under mandible and feet flesh-coloured.

The sexes are similar in colouring but the young have generally no ashy gray about the head, the whole being olive.

Breeding habits: Nest of grass, lined with finer material and placed in low bushes or clumps of grass and weeds, a few inches above the ground. Eggs 4; white sparingly spotted with various shades of brown, mostly in a ring about the larger end.

Season and range: A fairly common summer resident in wooded districts in Manitoba and westward into Alberta.

Here we come to a division known as the ground warblers. They frequent the ground or low bushes and their nests are placed on the ground or in low clumps of bushes, weeds or grass. While differing in several ways from the warblers of the trees, the most noticeable difference is in the feet. These are larger and stronger, and pale flesh colour in contrast to the small dark feet of the others. Burroughs says their feet and legs look as though "they had always worn silk stockings and satin slippers."

The mourning is quite a striking bird in its crêpe head-dress, and has a ringing song resembling that of the yellow-throat. It often sings from the tree-tops, although it places its nest on the ground. It is not an uncommon bird through the wooded parts of Manitoba during the summer, but does not appear in as large numbers along the streets during migrations as some of the others. In fact, the ground warblers as a class do not frequent the towns.

MacGillivray's Warbler: *Oporornis tolmiei*.

Length: About the same as the preceding.

Description: Very similar to the mourning, but the head, neck and forebreast all ashy gray with little or no black showing except on the sides of the head. Eyelids white. The



1. Male

2. Female

MARYLAND YELLOW-THROAT

changes for age, season and sex correspond exactly with the mourning.

Breeding habits: The same as the preceding.

Season and range: This is a western form found in the Rocky Mountains and ranging eastward at least to Cypress Hills. It replaces the mourning warbler on the western part of the prairie and overlaps with it where their ranges meet.

This bird so resembles the last that little need be said about it. Where their ranges meet there has, no doubt, been confusion in the records, and so their respective ranges have never been exactly determined.

Yellow-throat: Geothlypis trichas.

Length: 5 to 5.5 inches.

Description: Male: Upper parts clear grayish-olive shading to gray on the head, more bright towards the tail. Wings and tail brown, edged with olive. Belly dull white shaded with dark on the sides. A broad black band across the forehead and backward along the sides of the head to include the eyes. Chin, throat, breast, under side of the wing and the tail-coverts yellow. Bill black. Feet flesh-coloured.

Female: The yellow paler than in the male and no black about the head.

In fall the adults of both sexes and the young are brownish above and buff below, but the adult male shows more yellow than the female or young.

Breeding habits: Nest a bulky structure of grass and other material, on the ground or in a low clump of weeds, grass or bushes. Eggs 4 to 6, white sparingly speckled with brown.

Season and range: A common summer resident around marshes bordered by bush or scrub across the whole prairie region.

The yellow-throat is best known by its song. Its long-ringing *wichity, wichity*, may be heard in any marshy place

with bushes around the edge. The bird is rather difficult to see, but by sitting down and waiting, it may soon be discovered, clinging to a reed in the marsh or peering at one from among the leaves of a near-by bush. The nest is more difficult to locate and is a bulky structure placed on or near the ground.

This restless energetic bird is not as well known as it might be, as it does not obtrude itself upon the view and its song lacks any fine musical quality. Its beautiful colouring, however, makes it well worth the trouble of securing a good look at it, while a search for its nest has sufficient uncertainty about it to make the quest interesting.

Wilson's Warbler: *Wilsonia pusilla*.

Length: 4.75 inches.

Description: Upper parts bright greenish-olive. Wings and tail dark brown with greenish edgings, otherwise unmarked. Under parts, including the breast and throat, as well as sides of the head, a line over the eye and the forehead bright yellow. A somewhat square patch of black on the crown of the male, which is not always present in the female and absent in the young. Otherwise there is very little variation of colour for age or sex.

Breeding habits: Nest of moss and twigs, on the ground or very close to it. Eggs 4 or 5, white speckled with reddish-brown often in a circle about the larger end.

Season and range: A fairly common migrant across the prairies but never plentiful, and nesting in suitable places, particularly in the conifer woods of the Rocky Mountains.

This warbler, while not plentiful, is often seen particularly in the vicinity of spruce woods. A specimen found dead was brought into the school last year in Brandon, and its square black cap is frequently seen during the warbler migration in May. In western Alberta it becomes a common breeding species in the spruce forests of the Rocky Mountains and the foot-hills.

Canada Warbler: *Wilsonia canadensis*.

Length: 5.25 to 5.5 inches.

Description: Male: Upper parts bluish-gray, the crown spotted with black arrowheads which run together across the forehead. A slight yellow line running lengthwise through the forehead. Edges of the eyelids and a streak above the eye yellow. A black mark below the eye, running downward and backward and joining with a band of black streaks across the front of the neck. Whole under parts, except this black "necklace" and the white under tail-coverts, pure yellow. Wings and tail are unmarked. Feet, flesh-coloured.

Female and young have the black "necklace" and the spots on the head obscure, and the yellow scarcely so bright as in the male. Otherwise similar.

Breeding habits: Nest on the ground, made of grass and leaves. Eggs 4 or 5, white spotted with reddish-brown.

Season and range: A common migrant in Manitoba but less common farther west, yet occurring all across the plains.

While one of the commonest migrants in Manitoba, this warbler becomes rare across the prairies farther west. In the vicinity of the conifer forests in western Alberta it again becomes more plentiful. A few stay to breed in suitable places through the range, these breeding pairs becoming more plentiful to the north. Its main breeding ground, however, seems to be north of the prairie.

Redstart: *Setophaga ruticilla*.

Length: 5 to 5.5 inches.

Description: Male: Upper parts, head and breast bright blue-black. Under parts white. Sides and lining of the wings orange, which sometimes extends across the breast. An orange spot on each wing. A patch of orange on each side of the tail, the two patches almost meeting at the centre. Bill and feet black.



1. Male

2. Female

AMERICAN REDSTART

Female: Olive shading to gray on the head, dusky on the wings and white beneath. The orange markings of the male replaced with yellow.

The young resemble the female but are more brownish than olive.

Breeding habits: Nest well made of bark, fibres and hair, placed in the fork of a branch and fairly well up. Eggs

3 to 5, white to greenish, finely speckled with reddish-brown or lilac.

Season and range: A plentiful migrant and fairly common summer resident in wooded districts across the prairies.

In the redstart the wood warblers not only come to an end, but seem to have reached a climax in both colour and energy. It is the most active and most gorgeous of its race, and the female, although differing in shade, is scarcely less beautiful than the male. She cannot match his flaming orange for brightness, but her combination of olive and yellow would be brilliant colouring in any other species. Only the Blackburnian can equal the male redstart in intensity of colour and it does not show as much of it.

Every spring during the migration these redstarts may be seen along the streets, in parks or gardens or giving colour to the open woods. They are so easily recognized that all may know them, and from the number of inquiries one gets they certainly attract attention. By the first of June they have vanished and are to be found only in the deep woods or thickets. There they construct their tidy nests, not unlike the yellow warbler's, only they build it farther from the ground. From ten to twenty feet seems to be a favourite elevation. The material used varies greatly, almost any fibrous substance available will do, and the eggs could scarcely be distinguished from those of many other warblers.

During the breeding season it is a good singer, but its voice is weak and the song not very musical. It does, however, show a great variety of notes.

The warblers as a whole cannot be said to be a race of musicians. Some have sweetness but little strength, and some have strength without music in it. The voices of the yellow warbler and the yellow-throat may be heard from afar, but the quality of their songs leaves much to be desired.

FAMILY MIMIDÆ: CATBIRDS AND THRASHERS

Large brown or slate-coloured birds with loud musical songs in which parts of the songs of other birds are often imitated.

The mockingbirds and thrashers are a family of large musical birds, in structure and habits somewhat midway between the thrushes and wrens. They are dull-coloured, but make up for their plainness of plumage by their power of song. Most members of the family are southern and the best known is the mockingbird, which rivals the nightingale and skylark in literature, and is as noted for its power of mimicry as for its song.

The only two species we have belonging to this family of musicians are the catbird and the brown thrasher, both highly gifted and both with some of the mockingbird's power of imitating others.

Catbird: *Dumetella carolinensis*.

Length: 8.5 to 9 inches.

Description: Whole body slate-gray rather lighter beneath, darker on the wings and tail and deepening to black on the crown. Under tail-coverts rich chestnut-brown. Bill and feet black.

Breeding habits: Nest of twigs, lined with fibres, in a low bush or tangle. Eggs 4 or 5, deep greenish-blue, not unlike the robin's eggs but deeper in colour and smaller.

Season and range: A common summer resident in bushy places across the whole prairie region.

Of all our birds there is, perhaps, none that can compete with the catbird in quality, variety and continuity of song. It begins with the first peep of day and is singing when darkness has already fallen. Being erratic in all things it sings, too, at any and almost every time of day. The song is often varied with imitations of other birds, particularly



M. A. Huertes:
1897.

the robin or oriole. When not singing it is probably shrieking out a loud shrill call-note compared to the mew of a cat and which has given it its name; or uttering a plaintive, rather warbling call of two syllables very suggestive of "Mary".

When it is not vocal watch it, for the catbird will never be idle. It may be possibly robbing another bird's nest. I have never caught it at this, but time and again have found eggs broken and eaten, where all the circumstances pointed to it as the culprit. Burroughs tell of actually catching it at it and I have not the least doubt it is often guilty. Except for this the catbird is a desirable neighbor, active and cheerful, although at times possibly a little too noisy, and is always welcomed to the parks and gardens.

Brown Thrasher: *Toxostoma rufum*.

Length: About 11 inches.

Description: Upper parts including wings, tail and head, a rich red-brown with a sort of metallic lustre. Wing-coverts marked with blackish and white. Under parts white more or less tinged with pale brown, the breast and sides plentifully spotted or streaked with brown. Bill long and straight, black with some yellow at the base of the lower mandible. Feet pale. Tail very long.

Breeding habits: Nest a rough bulky structure of sticks, lined with leaves or bark and placed in a bush or heap of brush or even on the ground. Eggs 3 to 5, whitish or greenish spotted with brown.

Season and range: A regular and fairly common summer resident in heavily wooded regions across the prairies.

This large handsome bird is striking in appearance and is also an accomplished singer. It looks like a very large thrush, but is more reddish and has a longer tail. A peculiar habit of working its tail up and down with regular

strokes has given it the name of thrasher. It cannot be mistaken for any other bird when you see this tail movement, and, once recognized, will never be forgotten.

When you locate a thrasher it is worth while to wait until you hear it sing; then you have added to your list of woodland friends one that will always be remembered, an outstanding figure in the bird world.

It sings from the top of a high perch and can be heard for a long distance. In notes and power of imitation it resembles the catbird, but in quality of tone is superior.

Generally the thrasher is a bird of the deep woods along the river valleys, but now and then comes about the smaller groves near the houses. When it does, care should be taken to protect its nest from the ravaging cat, for, once disturbed, it will leave the locality, and the nest is so near the ground that it is easily reached by any animal.

FAMILY TROGLODYTIDÆ: WRENS

Small restless brown birds found about buildings or in the marshes. Very energetic and noisy but not always musical.

A wren is always a wren, and to enumerate minute points of difference between wrens and some other birds would not make them better known. Anyone familiar with the common house wren will recognize any of them; the family resemblance is very strong. They are all small; plain-coloured, exceedingly energetic birds, with a somewhat quarrelsome disposition, and addicted to scolding when anything disturbs them. Some of them sing well, although there is a harshness to the tone that suggests a voice much used in shrill speech; others have a chatter which lacks any claim to music. They are all fond of the

sound of their own voices and insist on enjoying the pleasure of hearing themselves as much as possible.

With us the wrens are all migratory, even the "winter wren" does not stay to face our winter weather. Being purely insect-eaters they would be unable to secure food during the cold period. No doubt these sprightly little birds do much to keep down insect pests in our groves and gardens, and their company is always welcome. Not a member of the family has any habit I know of that could even suggest its being injurious.

House Wren: *Troglodytes ædon*.

Length: 5 to 5.25 inches.

Description: Upper parts brown waved or barred with dusky, more particularly on the wings and tail. Lower parts brownish-white variegated in places with darker colours. Bill dark above and paler below. Feet brown.

Breeding habits: Nest of twigs lined with fibres, in holes in trees or other crevices. Eggs 6 to 9, minutely dotted with brownish, often giving a pinkish shade to the whole egg. More than one brood in a season.

Season and range: A very common summer resident about wooded regions across the whole prairies.

This is the "jenny wren" of the west. It differs from the eastern bird only in being rather more deeply coloured and with more tendency to dark bars on the back, wings and tail. For generally keeping busy and roundly scolding all intruders, the western bird is no whit behind any house wren of the eastern gardens.

The nest is built in any nook, whether a hole in a tree, a hollow stump or a crevice about a building. If the entrance is not small enough it is partly closed with sticks. The original nesting place was no doubt a hole in a tree, but I have seen a nest in the tool box of a binder sitting in



HOUSE WREN

the open and far from any woods. In fact this is one of the birds that easily adapts itself to the ways of civilization, and, let us hope, gratefully if not gracefully, accepts any help, by way of providing a nesting locality, which man can give.

Although a trifle noisy the wrens are good neighbours. They mind their own business and never molest anyone or

anything. The song is a little harsh but cheerful, and we cannot but admire the birds for the seriousness with which they seem to take their own contribution to the welfare of the world.

Short-billed Marsh Wren: *Cistothorus stellaris*.

Length: About 4.5 inches.

Description: Upper parts brown but not uniform, the crown and part of the back very dark and streaked with white. Lower parts whitish shaded more or less with brown. Wings, tail and upper tail-coverts crossed by dark bars. Bill dark above whitish below, very small, scarcely half as long as the head. A dull white line over the eye. Feet brown.

Breeding habits: Nest, a spherical mass of woven grass with the entrance in the side, placed about half way up the stems of a bunch of tall reeds. Often more than one nest is built, but only one occupied. Eggs white.

Season and range: A common summer resident in marshy places through Manitoba and eastern Saskatchewan, rarely found much farther west.

There is no more common bird in marshy places throughout Manitoba than this little wren. Its unmusical chatter, which does duty for a song, may be heard from the reeds and tall grass all day long; and the nests, suspended among the stems of the tall reeds, are almost too common to attract attention. All summer it makes the marsh vocal, and it stays well into the fall. In October, while the duck-hunter is in hiding near a flock of decoys, this little bird will visit his lair, look down on him from some tall reed, offer some advice and move on,—always too busy to stay long.

To most people the marshes are unattractive. The water is often too shallow to float a canoe and the mud too soft for wading. The mixed growth of tall grass, sedges and

cat-tails effectually screens all life hidden in their depths, and the masses of dead reeds are often impenetrable. Yet this little bird has chosen just such retreats and appears to enjoy life to the full, letting its good spirits overflow for the encouragement of all comers.

Prairie Marsh Wren: *Telmatodytes palustris*.

Length: About 5 inches.

Description: Upper parts brown, the middle of the back with a black patch generally distinctly streaked with white, although sometimes the white streaks may be wanting. The middle tail-feathers and upper coverts distinctly barred with blackish. Wings dark with blackish markings on the inner secondaries and more or less barred with lighter brown. Crown darker than the back, sometimes almost black. Under parts white, generally pure in the centre but shaded with brown on the sides and towards the tail. A dull white line over the eye. Bill, blackish above, paler or flesh-coloured below, at least one half as long as the head. Feet brown.

Breeding habits: Nest, a large globular mass of woven grass and rushes, the entrance in the side, suspended in a mass of reeds. Generally more nests built than occupied, and often in colonies. Eggs 5 to 10, dark chocolate brown.

Season and range: Quite a common summer resident in the larger marshes across the prairies.

This is the prairie, long-billed, marsh wren and I have never seen it so plentiful as the short-billed. In fact some of the reports would indicate that it is more plentiful than it is. I have never seen it about the small sloughs or marshy places, but, in the wider stretches of marsh about the larger lakes, it may be found nesting in the tall round rushes which grow with their roots in the water, while the short-billed nests in the tall grass and cat-tails in rather drier locations.



PRAIRIE MARSH WREN

ADDITIONAL RARER SPECIES

The Winter Wren, *Nannus hiemalis*, is found in deep woods in the eastern part of the range.

The Rock Wren, *Salpinctes obsoletus*, is found in rough territory in south-western Saskatchewan and southern Alberta.

FAMILY CERTHIIDÆ: CREEPERS

A small family of active little forest birds that glean their living by picking insects out of the cracks in the bark of trees. Bill curved downward but not hooked.

The creepers are small, dull-coloured birds of the deep woods. They creep over the tree trunks in search of food, using their stiff tail-feathers for support after the manner of the woodpeckers, but they never go head downward as the nuthatches do. One of them may always be recognized by its long, stiff, sharp-pointed tail-feathers and long slender bill with a downward curve. The family is represented with us by a single species.

Brown Creeper: *Certhia familiaris americana*.

Length: 5.25 to 5.75 inches.

Description: Upper parts dark brown shading into reddish-brown towards the tail, and streaked or spotted with dull white. Wing-coverts tipped with white and the wings crossed by two dull white bars, or sometimes apparently only one, the other in its dullness fusing with the general colour. Entire under parts uniform bluish-gray. Tail long, grayish-brown, the feathers stiff and sharp-pointed. Bill as long as the head, slender and curved downward, dark above and paler below. Feet brown.

Breeding habits: Nest of grass and moss in a hole in a tree, often in a deserted woodpecker's nest or under a piece of loose bark. Eggs 5 to 9, white speckled with reddish-brown, more thickly toward the larger end.

Season and range: A rather rare migrant or summer resident in Manitoba, and westward.

The creepers are birds of retiring habits which frequent the deep woods and so are seldom seen. They occur quite regularly in Manitoba during migration, but do not seem



* BROWN CREEPER

to extend farther west. I do not know of any breeding record in the province.

On April 15th of this year, I noticed a bird make several attempts to catch flies on the window-pane from the outside. As the glass was between it and the fly, it tried another window which chanced to be open and flew across the room, lodging on a window quite close to where I was lecturing on psychology. I was not a little surprised and pleased,

when it came to rest, to see the long, pointed tail-feathers and slender curved bill of the brown creeper.

I put it in an insect cage, where it was very active all day but apparently not at all frightened, as it frequently uttered a succession of soft notes, which in tone denoted a song rather than an alarm note. In the evening I collected a number of bluebottle flies and put them into the cage and the scrambling which resulted left no doubt as to their reception. They were not only warmly received but rapidly devoured, and the bird then settled down for the night, and when I left it about ten o'clock it was still quiet. The next day it was as active as ever and would take flies from the fingers, showing no sign of fear. On being fed it became dull again, and was taken out and photographed as my secretary held it in her hand, apparently content to stay as long as the flies were furnished. On being liberated it showed little inclination to go, but finally realizing that it was free, clambered up the side of the conservatory, flew to a tree and, when last seen, was carefully exploring all the cracks in the bark in search of insects, going up in a spiral after the manner of the creeper.

Unfortunately the only camera available was not fitted with an attachment for taking portraits and the picture was too small for reproduction.

FAMILY SITTIDÆ: NUTHATCHES

Small creeping birds with straight bills and a habit of going head downwards on the trunks of trees.

The nuthatches, like the creepers, are a small family of little birds that get their food by creeping about on the trunks of trees, searching every nook and corner for insects. Unlike the creepers they will eat fruits as well as insects, and the name is derived from a habit, which members of



WHITE-BREASTED NUTHATCH

one species in Europe have, of wedging a nut into a crevice and then pecking at it until the shell is broken.

They are the most nimble of all creeping birds, and go over a tree head downward or sideways just as well as when erect. They creep without the aid of the tail, which is short and not generally in contact with the trunk. This habit of running around on tree trunks has given them the name of tree mice.

White-breasted Nuthatch: *Sitta carolinensis*.

Length: 5.5 to 6 inches.

Description: The upper parts, including the central tail-feathers and some edgings on the wings, a clear bluish-gray. Crown and back of the neck black. Under parts, including the sides of the head and surrounding the eye, dull white more or less tinged on the sides and about the tail with reddish-brown. Wings blackish edged with the gray of the back and with one white bar. Tail, except the central feathers, black marked with white. Bill bluish-black. Feet brown.

In the female the black of the crown and neck is less pure than in the male.

Breeding habits: Nest in holes in trees and lined with grass, hair or feathers. Eggs 5 to 8, white speckled with reddish or purplish.

Season and range: A fairly common resident in wooded districts from Manitoba westward.

This nuthatch is not often seen in the summer. In the depths of the woods, however, its peculiar weak nasal note may often be heard, and a little care will locate the bird. In fall and winter it comes quite freely around the streets and gardens, submitting every tree to a thorough search. It is often found in company with the chickadee and the hairy woodpecker. I have quite frequently seen the three species on the same or adjacent trees.

Red-breasted Nuthatch: *Sitta canadensis*.

Length: 4.5 to 4.75 inches.

Description: Male: Upper parts, including the central tail-feathers, bluish. Wings darker with gray edging. Tail, except the central feathers, black. Top of the head black running down on the neck. A black line along the side of the head enclosing the eye and extending down the neck. A white line above the eye, joining across the forehead. Under parts reddish-brown, varying greatly in shade. Bill dark bluish. Feet bluish-brown.

Female: The crown the same colour as the back and the stripe along the side of the head merely dark, not glossy black. Under parts on the whole paler than in the male, but there is great variety in intensity of the reddish colour in both sexes.

Breeding habits: Very similar to the preceding.

Season and range: A common migrant across the prairie and occasionally nesting in suitable places.

This little bird, while one of our most regular migrants, is rather erratic in its numbers. Some seasons it comes in great numbers, and on almost every tree one or more may be seen going up or down or around, quite indifferent as to the direction in which its head is pointed. When that migration is over, it may not be plentiful again in the same place for several seasons, but every season brings a few. I cannot recall a spring or fall for years in which I have not seen the red-breasted nuthatch and on several occasions have seen them very plentiful. They seldom nest with us, but once I found a pair in July and their nest could not have been far away. I have seen this bird alight on the trunk of a tree head downward, a feat which no other bird could perform.

FAMILY PARIDÆ: CHICKADEES

Small energetic winter birds, frequenting the branches of trees and bushes, but not creeping on the trunks.

The chickadees are active, hardy, little birds, never migratory, but enduring apparently without inconvenience the coldest winters. It is hard to see how so small a body can stand such cold. Yet in the coldest winter weather they are cheerful and seemingly well content.

They are quite prolific, raising more than one brood a year, and there is no variation of plumage for age, sex or



CHICKADEE

season. Next to the nuthatches, they are the best bird acrobats and will hang on the underside of a twig with the greatest ease.

Black-capped Chickadee: *Penthestes atricapillus*.

Length: 5.25 to 5.5 inches.

Description: Upper parts, including the wings and tail, gray with a tinge of brown. The wing and tail-feathers edged

with dull white. Under parts white or whitish with just a wash of brown on the sides. Crown, reaching well down on the neck and the throat, running down on the breast, jet black. Sides of the head and neck pure white. Tail from 2.5 to 3 inches long. Bill and feet dark bluish.

Breeding habits: Nest in a hole in a tree sometimes made by the bird. Eggs 6 to 8, white speckled with reddish-brown.

Season and range: A common resident in wooded regions throughout the whole prairie region and far northward.

The chickadee is a bird we associate with the deep woods and cold weather. It is a mystery how any living creature can secure, in such weather, sufficient food to supply the heat and energy necessary to sustain life. Yet the bird is always cheerful and apparently happy.

It is a sprightly little bird, always in motion and constantly repeating its *chickadee-dee-dee*, even in the coldest weather. It is often quite fearless in its search for food. I have seen it alight in the cut when a tree was being felled, taking chances on being struck with the axe, in its eagerness to secure any frozen grubs that were disclosed. Although a bird of the woods, it does not entirely avoid the open places, so long as there is anything on which it can perch. In late fall it often shares the duck hunter's lunch among the tall reeds of the marsh, and regularly visits his lodge to feed on morsels thrown out by the not-too-particular housekeepers.

This bird nests regularly in any wooded district across the prairie, but it is rather secretive during the nesting season and escapes notice. Any hole in a tree or stump will do, and often the little bird makes a hole for itself when the wood is softened by decay. Our bird is a subspecies called the long-tailed chickadee, but it differs very little from the type.

ADDITIONAL RARER SPECIES

The Mountain Chickadee, *Penthestes gambeli*, in the Rocky Mountains and the foothills.

The Hudsonian Chickadee, *Penthestes hudsonicus*, in the spruce woods to the north, sometimes, in winter, as far south as the valleys of the Assiniboine and the Qu'Appelle.

FAMILY SYLVIIDÆ: KINGLETS, ETC.

Very small birds of the tree-tops, with red or yellow crown-patch and white wing-bars. Song loud and musical.

The kinglets are the smallest of our birds except the hummingbird. They resemble the wood warblers in habits but are smaller, have shorter bills and are much better singers than our warblers. They live entirely upon insects and do their share in preserving the forests and shrubberies from these pests.

This family includes, not only the kinglets, but the "old world" warblers and the gnatcatchers. Only the one sub-family is found with us.

Golden-crowned Kinglet: *Regulus satrapa*.

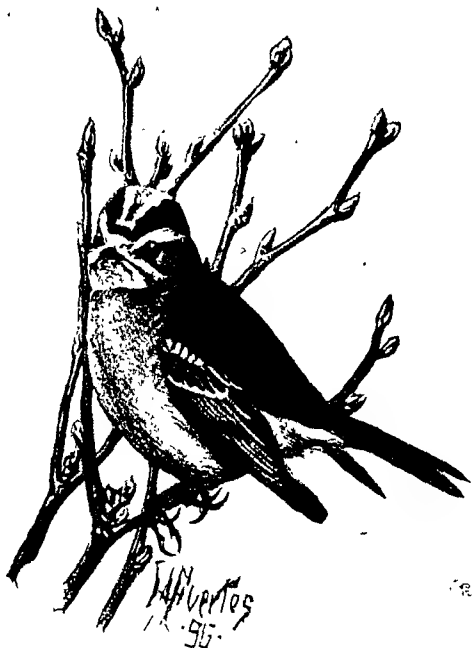
Length: 4 inches.

Description: Male: Olive green or grayish above, the wings and tail somewhat darker and edged with yellowish, the wing with two white bars. Under parts dull white. Crown black, enclosing a patch of orange-red surrounded by pure yellow.

Female and young: Similar to the male but no red on the crown.

Breeding habits: Nest a small structure of fibres, hair and feathers, in the boughs of a tree or tall shrub. Eggs 6 to 10, white speckled with darker colours.

Season and range: A regular but not plentiful summer resident in wooded districts of eastern Manitoba and through the spruce forests to the Rocky Mountains.



GOLDEN-CROWNED KINGLET

Except the ruby-throated hummingbird, this is our smallest bird. Its small size, dainty appearance and distinctive colouring make it easily recognized; but it is not plentiful enough to be well known. It prefers the ever-green forests, but, in migrations at least, is often seen about the streets and gardens.

Ruby-crowned Kinglet: *Regulus calendula*.

Length: 4 to 4.5 inches.

Description: Male: Upper parts olive green shading into yellowish towards the tail, the wings and tail dusky, the wings with two white bars. A bright scarlet patch on the crown.

Under parts dull white tinged with yellowish or greenish in places. Bill and feet black.

Female and young: Similar to the male but lacking the scarlet on the crown.

Breeding habits: Nest a large, closely woven structure of moss, hair and feathers placed on a bough, generally an ever-green. Eggs numerous, sometimes as many as a dozen, creamy-white speckled with brown.

Season and range: A common summer resident in wooded places, particularly in spruce forests, across the whole range.

But slightly larger than the golden-crowned and quite as attractive, the ruby-crowned is much the more plentiful. Every spring numbers may be seen along the streets, while its song at times may be heard from any tree top. No other bird of its size is as strong a singer as this kinglet, and one wonders how this mite can produce such a volume of sound. It associates with the warblers in the spring and fall migrations, but is a much better songster than any of them.

FAMILY TURDIDÆ: SOLITAIRES, THRUSHES AND BLUEBIRDS

Ground birds with well developed feet. They generally hop rather than walk, and frequent shrubberies in preference to the open.

The scientist has placed this family at the close of the list, which means that its members are regarded as the most highly developed of all birds. However this may be, it is certain that no other class has met with such universal admiration.

The food of these birds is made up almost entirely of insects or worms, and no member of the family has any habit that could be called injurious. They are entirely beneficial and among our most desirable birds.

SUBFAMILY TURDINÆ: THRUSHES AND BLUE-
BIRDS

Wilson's Thrush: *Hylocichla fuscescens*.

Veery.

Length: About 7.5 inches.

Description: Above evenly olive-brown with scarcely any shade of tawny, back and tail the same colour. Throat white or pale buff, marked on the sides with small brown arrow-heads which form a spotted band across the breast. Under parts white, shading to pale gray on the sides. No ring about the eye.

Breeding habits: Nest of grass, weeds and leaves, on the ground or very near it, often at the bottom of a bush. Eggs 4 or 5, greenish-blue like the robin's eggs but smaller.

Season and range: A common summer resident in wooded districts across the prairie region and westward.

The willow thrush, which is the name given to the western form, is simply a colour variation of the veery, or Wilson's Thrush, of the east. It differs from the latter in being less of a tawny or cinnamon brown on the back, and a paler buff on the throat. It is said to average slightly larger, but to one familiar with the eastern bird, this difference in size is not noticeable. The darker colouring, however, is quite apparent, and may lead to confusing it with the olive-backed thrush, which it closely resembles in the olive-brown shade of the back. It is easy to distinguish the veery from the olive-backed by the breast, as it has no spots except the very small arrow-heads along the sides of the throat.

In song, general habits and eggs, the eastern and western forms are identical, and any difference in the materials out of which the nest is made is due to the difference in the materials available. The willow thrush uses more grass and



Brown Thrasher.

Wilson's Thrush or Veery.

MAY—AMONG THE THICKETS.



weeds and fewer twigs. The name is intended to indicate that the bird is found mostly among the willows, but this really does not show any change in habit. The fact is that the veery, whether the eastern or western form, frequents moist, low-lying, wooded regions, mostly along streams. In the prairie region such places are often covered largely by willows, but it is the locality and the proximity of water, not the kind of the trees, that seem to be chosen. In many places it is found, quite as frequently and even more so, among poplars or other trees.

The song was to me for a long time a woodland mystery. While unmistakable, it is at the same time indescribable. It is heard most often in the evening; and the failing light, the character of the location, together with the retiring nature of the bird and the difficulty of locating the exact place from which the song comes, combine to make it hard to see the bird while singing. Once seen and heard, however, neither bird nor song will ever be forgotten.

Various attempts have been made to interpret the song in syllables, but all are unsatisfactory. The only way to know it is to hear it, and then the veery will always be remembered as one of the sweetest and most plaintive of the woodland songsters.

Gray-cheeked Thrush: *Hylocichla alicia*.

Length: 7.5 to 8 inches.

Description: Head and back uniform olive-brown. Throat buff and slightly speckled. Sides dull grayish. Breast spotted, the spots running into a wash on the belly. Cheeks gray. Bill slender. No ring about the eye.

Breeding habits: Nest in bushes, made of moss, twigs and grass. Eggs 4, greenish-blue speckled with brown.

Season and range: An abundant migrant and rare summer resident in Manitoba. More rare westward across the prairie region.

This thrush is a common visitor in yards and shrubberies in Manitoba and across the prairies during both spring and fall migrations. It comes and goes silently, and nests, according to Ridgway, "from Labrador and the west side of Hudson Bay north to the Arctic coast and the coast of Bering's Sea." Its song is never heard during its migration through the prairie provinces, but it is said by those who have listened to it in the breeding haunts of the bird to resemble that of the veery.

In colour and markings the gray-cheeked resembles the olive-backed, but the sides of the head have no yellowish tinge and there is no buff ring around the eye. These points, along with the speckled throat, should serve to distinguish the two species. It is also slightly larger than the olive-backed.

Olive-backed Thrush: *Hylocichla ustulata*.

Length: 7 to 7.5 inches.

Description: Upper parts, including the head, rich olive-brown, deepest on the wings and tail. Under parts buff, passing to white toward the tail, rather darker on the sides and spotted, except on the throat, with blackish arrow-shaped spots. Bill and feet brown. A yellowish ring about the eye.

Breeding habits: Nest of twigs, lined with finer material, in low trees or bushes. Eggs 4 or 5, greenish-blue spotted with brown.

Season and range: A fairly common migrant and summer resident in wooded districts across the Canadian prairies.

The olive-backed is one of the common thrushes in migration and may be found nesting in suitable places from eastern Manitoba to the mountains. It never seems to occur in very large numbers as some migrants do, but a few are always seen with every migration.



OLIVE-BACKED THRUSH

This spring, while standing watching a game of tennis, a bird flew against the wire netting quite close to me and fell almost at my feet. I picked it up and found it to be the olive-backed thrush. On being put in a cage it fully recovered from the blow, but was very shy and absolutely refused food. An attempt was made to secure a photograph, but it could not be kept still. When liberated in the conservatory, it showed the greatest nervousness until it escaped by the window.

The contrast between the thrush and the brown creeper which occupied the same cage a few days earlier was very great. The creeper ate ravenously and became quite quiet, but the thrush refused to become reconciled. I have found the hermit thrush also incapable of being tamed, but not as restless as the olive-backed.



HERMIT THRUSH

Hermit Thrush: *Hylocichla guttata*.

Length: 7 to 7.25 inches.

Description: Upper parts olive-brown turning to reddish towards the tail. Throat and breast buff, or almost white, the breast thickly spotted with brown spots which get larger going backward. The rest of the under parts dull white. Bill blackish above but lighter below. Feet pale brown. A yellowish ring about the eye.

Breeding habits: Nest and eggs very similar to those of the willow thrush.

Season and range: A common migrant across the prairies and nesting in suitable places.

It is easy to distinguish the hermit from all other thrushes by the rusty-red colour of the upper tail-coverts and part of the back. Even in flight this colouring can be detected. For those who have difficulty in telling the thrushes apart, it is well to remember the points of difference. They are all olive or olive-brown on the back, but the hermit gets reddish towards the tail. All but the veery have large spots on the breasts, but it has quite small spots down the sides of the breast often meeting in a band across the upper breast. This leaves only the gray-cheeked and the olive-backed with uniform olive backs and large spots on the breasts; and of these the olive-backed has a yellowish ring about the eye while the gray-cheeked has not.

The hermit is somewhat erratic in its migrations. Sometimes it is very plentiful and at others scarcely a bird will be seen. After staying about the gardens for a week or two it disappears, going farther north or retiring to the deep woods where it nests. It is only in the depths of these woodland solitudes that it is found in summer and only there that its wonderful song may be heard, but a few notes may sometimes be heard in migration. It generally reaches us toward the end of April and disappears early in May.

Robin: *Planesticus migratorius*.

Length: About 10 inches.

Description: Back olive-gray. Head black. Tail black, with white marks on the outer feathers. Wings dark brown. Entire under parts, except the under tail-coverts, reddish orange, the throat streaked with black and white. Bill yellowish with dark tip. Feet dark.

Breeding habits: Nest of twigs and mud, lined with fibres and placed on a horizontal bough or in the fork of a low tree or bush. The nesting locations have been much influenced by the habit of building about buildings. Eggs 4, greenish-blue.

Season and range: An abundant summer resident.

Surely to try to make the robin better known or more popular by description "is wasteful and ridiculous excess" of words. Children learn to know the robin as they learn to talk, and the fact that no one ever seeks to injure it show its popularity. Even its taste for fruit is overlooked, just as its unnecessary scolding when you approach its nest is disregarded. Undoubtedly it is the most universal favourite among birds.

It builds a good nest but is often very careless about where it is placed. One pair, possibly young housekeepers, built a nest last season in the open eavetrough of the front porch. After some eggs had been laid a rain flooded the nest, but a brave attempt was made to restore it. Only the necessary cleaning out of the gutter convinced them that the site chosen was unsuitable.

The American robin is an entirely different species from the English "Robin Redbreast"; the latter is a smaller bird of more compact build, with a decidedly red breast, in form resembling our bluebird, but more closely related to the oriole.

Bluebird: *Sialia sialis*.

Length: 6.5 to 7 inches.

Description: Male: Upper parts deep blue with some darker edgings on the wings. Breast a chestnut-red fading to white on the belly. In the female the colours are not as pure as in the male.

Breeding habits: A hole in some stump or tree, loosely lined with almost any material, furnishes the nest. The bird

takes readily to nooks about buildings or bird-boxes. Eggs 4 to 6, blue or white.

Season and range: A summer resident in Manitoba, becoming quite common in the eastern part but more rare farther west.

"And yonder bluebird with the earth tinge on his breast and the sky tinge on his back,—did he come down out of heaven on that bright March morning when he told us so softly and plaintively that, if we pleased, spring had come? Indeed, there is nothing in the return of the birds more curious and suggestive than in the first appearance, or rumours of the appearance, of this little blue-coat."

JOHN BURROUGHS

The gentlest and most unobtrusive of all birds is the bluebird. Its very note suggests its gentle nature. It is sweet and soft and without a harsh tone. Its appearance is in keeping with its nature. Blue as a colour always suggests to me gentleness and purity. The blue-jay is badly coloured,—it does not suit his thieving and his screaming. But the bluebird is all that the beautiful colour suggests, and it is a pity that the severity of our climate and the lack of suitable nesting places seem to keep its numbers small.

In the Red River valley, particularly east and north of Winnipeg, this species is now fairly common, indeed about as plentiful as it ever becomes anywhere. In other parts of the province it is much more rare, although I usually see a few about Brandon each year. Last year a pair attempted to build in the iron tube which is used to protect the bracing wire of a telephone pole within the city limits. They were driven off by the sparrows and I saw no more of them. Lack of suitable nesting places seems to be the greatest reason for their scarcity, and more bird-boxes about houses might attract them. They do not seem to adapt themselves

easily to new nesting sites, and are not sufficiently aggressive to fight for the few suitable holes that may be found about our prairie towns and fields.

Mountain Bluebird: *Sialia currucoides*.

Length: 6.5 to 7.9 inches.

Description: Male: Back, wings, tail and breast blue, the breast somewhat lighter than the other parts. Belly and under tail-coverts white. Female: Grayish-brown above. Wings, tail, rump and upper tail-coverts light blue, breast grayish-brown, belly and under tail-coverts white.

Breeding habits: Nest and eggs similar to those of the common bluebird.

Season and range: A summer resident in British Columbia and north to Slave Lake, extending eastward across the prairie through Alberta and southern Saskatchewan to south-western Manitoba; wintering farther south.

This is the bluebird of the west and replaces the common bluebird of the eastern half of the continent. The ranges of the two meet or overlap in the prairie region and this species extends westward to the Pacific. Inhabiting, as it does, a region which has but recently been peopled, it has not been as long in contact with man as its eastern relative. It may be, too, that it is somewhat more shy, but it certainly has not yet the place in literature and art which has been given to its better known, if not more sociable, eastern cousin. In habits and song the two species are so nearly alike that only the close observer notices a difference. It is now becoming fairly common in Manitoba.

INDEX

- Acanthis linaria*, 229
Accipiter cooperi, 128
 velox, 126
Actitis macularia, 96
Æchmophorus occidentalis, 2
Agelaius phoeniceus, 213
Aix sponsa, 41
Alcedinidæ, 160
Alaudidæ, 198
Anas platyrhynchos, 29
 rubripes, 31
Anatidæ, 26
Anatinæ, 29
Anseres, 25
Anser albifrons, 58
Anserina, 54
Anrostomus vociferus, 176
Aphrizidæ, 101
Aquila chrysaetos, 135
Archibuteo ferrugineus, 134
 lagopus, 133
Archilochus colubris, 183
Ardea herodias, 68, 69
Ardeidæ, 66
Arenaria interpres, 102
Asio flammeus, 147
 willsonianus, 146
Astragalinus tristis, 230
Astur atricapillus, 129
Asyndesmus lewisi, 172
Avocet, 85

Baldpate, 33, 34
Bartramia longicauda, 95
Birds of Prey, 122
Bittern, 66
 Least, 67, 68
Blackbirds, 208
 Brewers, 217
 Crow, 218
 Red-wing, 213
 Rusty, 217
 White-winged, 254
 Yellow-headed, 212
Black Duck, 31
Bluebill, 48
Bluebird, 326
 Mountain, 328
Blue Goose, 56
Bobolink, 209
Bombycilla cedrorum, 264
 garrula, 263
Bombycillidæ, 263
Bonasa umbellus, 110
Botaurus lentiginosus, 66
Brant, 62
Branta bernicla, 62
 canadensis, 59
Brown Thrasher, 302
Bubo virginianus, 153

Buffle-head, 50
Bunting, 219
 Indigo, 255
 Lark, 254
 Lazuli, 255
 Snow, 233
Butcher Bird, 266
Buteonidæ, 124
Buteo borealis, 130
 platypterus, 133
 swainsoni, 132
Butter Ball, 50
Buzzard, 124
 Swainson's, 133
 Turkey, 123

Calamospiza melanocorys, 254
Calcarius lapponicus, 234
 ornatus, 235
Calidris leucophæa, 90
Canachites canadensis, 107
 franklini, 109
Canada Goose, 59
Canary, 230
Canvas-back, 44
Caprimulgidæ, 176
Carpodacus purpureus, 225
Catoptrophorus semipalmatus, 94
Catbird, 300
Cathartes aura, 123
Cathartidæ, 123
Centrocercus urophasianus, 118
Certhia familiaris, 309
Certhiidæ, 309
Ceryle alcyon, 160
Chætura pelagica, 182
Charadriidæ, 98
Charadrius dominicus, 99
Charitonetta albeola, 50
Chaulelasmus streperus, 33
Chen caerulescens, 56
 hyperboreus, 54
 rossi, 57
Chickadees, 314
 Black-capped, 315
 Hudsonian, 317
 Mountain, 317
Chondestes grammacus, 240
Chordeiles virginianus, 178
Circus hudsonius, 125
Cistothorus stellaris, 306
Clamatores, 187
Clangula clangula, 49
Coccyges, 159
Coccyzus erythrophthalmus, 159
Colaptes auratus, 172
 cafer, 174
Columbæ, 119
Colymbidæ, 2

Colymbus auritus, 5
 Holboëlli, 3
 nigricollis, 6
 Coot, 81
 Cormorants, 21
 Double-crested, 21, 22
 Corvidæ, 200
 Corvinæ, 205
Corvus brachyrhynchos, 205
 corax, 205
Coturnicops noveboracensis, 80
 Cowbird, 211
 Cranes, 74
 Little Brown, 75, 77
 Sandhill, 77
 Whooping, 75, 77
 Creepers, 309
 Black and White, 274
 Brown, 309
 Crossbills, 226
 Crow, 205
 Crow Duck, 21
Cryptoglaux acadica, 150
 funerea, 150
 Cuckoo, 159
 Cuculidæ, 159
 Curlew, 97
Cyanocitta cristata, 201
 stelleri, 203
 Cygninæ, 63

Dasila acuta, 39
Dendragapus obscurus, 105
Dendroica æstiva, 279
 castanea, 285
 coronata, 281
 fusca, 287
 magnolia, 283
 palmarum, 288
 pennsylvanica, 284
 striata, 286
 tigrina, 278
 vigorsii, 288
 Dicksissel, 255
Dolichonyx oryzivorus, 209
 Dove, 120, 121
 Dowitcher, 87
Dryobates pubescens, 165
 villosus, 164
 Ducks, 26
 Baldpate, 34
 Black, 31
 Buffle-head or Butter Ball, 50
 Canvas-back, 44
 Gadwall, 33
 Golden-eye or Whistler, 49
 Gray, 33
 Lesser Scaup or Bluebill, 48
 Mallard, 29
 Pintail, 39
 Redhead, 42
 Ring-necked, 49
 River, 29
 Ruddy, 53
 Sea, 42
 Scaup, 46
 Spoonbill or Shoveller, 38
 Wood, 41

Dumetella carolinensis, 300
 Eagle, 124
 Golden, 135
 Northern Bald, 137
Ectopistes migratorius, 119
Empidonax minimus, 196
Erismatura jamaicensis, 53
Euphagus carolinus, 217
 cycanocephalus, 217

Falco columbarius, 141
 mexicanus, 140
 peregrinus, 140
 rusticolus, 139
 sparverius, 143
 Falcon, 138
 prairie, 140
 Falcones, 124
 Falconidæ, 138
 Finches, 219
 Gray-crowned Rosy, 228
 Purple, 225
 Flicker, Hybrid, 175
 Northern, 172
 Red
 Flycatcher, 187
 Crested, 191
 Least, 196
 Olive-sided, 195
 Traill's, 197
 Wright's, 197
 Yellow-bellied, 197
 Fool Hen, 105
 Fringillidæ, 219
Fulica americana, 81
 Fulicidæ, 81
 Fuligininæ, 42

Gadwall, 33
 Gallinæ, 103
 Gallinaceous Birds, 103
Gallinago delicata, 85
 Garrulinæ, 200
Gavia immer, 9
 Gaviidæ, 9
Geothlypis trichas, 295
 Goatsuckers, 176
 Godwit, Marbled, 90
 Golden-eye, 49
 Goldfinch, 230
 Goose, Blue, 56
 Canada, 59
 Hutchins's, 61
 Laughing, 58
 Ross's, 57
 Snow, 54
 White-fronted, 58
 Goshawk, 129
 Grackle, 218
 Gray Duck, 33
 Grebes, 2
 Eared, 6
 Holboëll's, 3, 4
 Horned, 5, 6
 Pied-billed, 7
 Western, 2, 4

- Grosbeaks, 219
 Evening, 222
 Pine, 224
 Rose-breasted, 252
 Grouse, 105
 Franklin's, 109
 Pinnated, 114
 Richardson's, 105
 Ruffed, 110
 Sharp-tailed, 116
 Gruidæ, 74
 Grus americana, 75
 canadensis, 75
 mexicana, 77
 Gulls, 11
 Bonaparte's, 16
 California, 12
 Franklin's, 12, 14
 Herring, 12
 Ring-billed, 12, 13
 Gyrfalcon, 138
 Black, 139

 Halæetus leucocephalus, 137
 Hawks, 124
 Blue Hen, 129
 Broad-winged, 133
 Cooper's, 128
 Duck, 140
 Ferruginous rough-legged, 134
 Fish, 144
 Hen, 130
 Marsh, 125
 Pigeon, 141
 Red-tailed, 130
 Rough-legged, 133
 Sharp-shinned, 126
 Sparrow, 143
 Swainson's, 132
 Hell-diver, 7
 Helodromas solitarius, 93
 Herodiones, 66
 Herons, 66
 Black-crowned, 71
 Great Blue, 68, 69
 Hesperiphona vespertina, 222
 Hirundinidæ, 256
 Hirundo erythrogastra, 259
 Honker, 59
 Hummingbird, 183
 Hydrochelidon nigra, 19
 Hylodichla alicia, 321
 fuscescens, 320
 guttata, 324
 ustulata, 322

 Icteridæ, 208
 Icterus bullocki, 216
 galbula, 215
 Iridoprocne bicolor, 261
 Ixobrychus exilis, 67

 Jays, 200
 Black-headed, 203
 Blue, 201
 Canada, 203
 Steller's, 203

 Junco hyemalis, 247

 Killdeer, 100
 Kingbird, 188
 Arkansas, 189
 Kingfisher, 160
 Kinglets, 317
 Golden-crowned, 317
 Ruby-crowned, 318

 Lagopus lagopus, 113
 Lamellirostral Swimmers, 25
 Laniidæ, 266
 Lanius borealis, 266
 ludovicianus, 268
 Laridæ, 11
 Lark, Horned, 198
 Meadow, 214
 Larus argentatus, 12
 californicus, 13
 delawarensis, 13
 franklini, 14
 philadelphia, 16
 Laughing Goose, 58
 Lesser Scaup Duck, 48
 Leucosticte tephrocotis, 228
 Limicolæ, 83
 Limosa fedoa, 90
 Longipennes, 11
 Longspur, Chestnut-collared, 235
 Lapland, 234
 McCown's, 236
 Long-winged Swimmers, 11
 Loon, 9
 Loxia curvirostra, 226

 Macrochires, 176
 Macrorhamphus griseus, 87
 Magpie, 200
 Mallard, 29
 black, 31
 Marila americana, 42
 affinis, 48
 collaris, 49
 marila, 46
 vallisneria, 44
 Mareca americana, 34
 Martin, 256
 Meadowlark, 214
 Melanerpes erythrocephalus, 170
 Melospiza georgiana, 250
 melodia, 249
 Mergansers, 26
 American, 26
 Hooded, 28
 Red-breasted, 27
 Merginæ, 26
 Mergus, Americanus, 26
 Cucullatus, 28
 Serrator, 27
 Micropodidæ, 180
 Mimidæ, 300
 Mniotilta varia, 274
 Mniotiltidæ, 273
 Molothrus ater, 211
 Mud Hen, 81
 Myiarchus crinitus, 191

Myiochanes virens, 195
richardsoni, 197

Nettion carolinense, 35
 Nighthawk, 178
Nucifraga columbiana, 208
Numenius americanus, 97
 Nutcracker, Clark's, 208
 Nuthatches, 311
 Red-breasted, 313
 White-breasted, 313
Nuttallornis borealis, 195
Nyctea nyctea, 155
Nycticorax nycticorax, 71

Oidemia americana, 51
 deglandi, 52

Olor buccinator, 64
 columbianus, 63
Oporornis agilis, 292
 philadelphia, 292
 tolmiei, 293

Oriole, Baltimore, 215
 Bullock's, 216

Oscines, 198
Osprey, 144

Otocoris alpestris, 198
Otus asio, 152

Oven Bird, 289
 Owls, 146

 Barred, 148
 Burrowing, 157
 Great Grey, 149
 Great Horned, 153
 Hawk, 156
 Hoot, 148
 Long-eared, 146
 Richardson's, 150
 Saw-whet, 150
 Screech, 151, 152
 Short-eared, 147
 Snowy, 155

Oxyechus vociferus, 100

Paludicolæ, 74

Pandion haliaetus, 144

Pandionidæ, 144

Paridæ, 314

Partridge, 103, 110

 Gray, 103
 Hungarian, 104
 Spruce, 105, 107

Passer domesticus, 232
Passerculus sandwichensis, 239

Passeres, 185

Passerella iliaca, 251

Pedecetes phasianellus, 116

Pelecanidæ, 23

Pelecanus erythrorhynchos, 23

Pelicans, 23

 White, 23

Penthestes atricapillus, 315

gambeli, 317

hudsonicus, 317

Perching Birds, 185

Perdix perdix, 103

Perisoreus canadensis, 203

Petrochelidon lunifrons, 258
Pewee, Western Wood, 197
 Wood, 195

Phalacrocoracidae, 21

Phalacrocorax auritus, 21

Phalaropes, 83

Phalaropodidæ, 83

Phasianidæ, 103

Phlœotomus pileatus, 169

Phœbe, 192

 Say's, 194

Pica pica, 200

Pici, 164

Picidæ, 164

Pigeon, 119

Picoides americanus, 166
 arcticus, 165

Pine Siskin, 231

Pinicola enucleator, 224

Pintail, 39, 40

Pipilo erythrophthalmus, 251

Piranga erythromelas, 256
 ludoviciana, 255

Pisobia minutilla, 88

Planesticus migratorius, 225

Plectrophenax nivalis, 233

Plover, Black-bellied, 98

 Golden, 99

 Killdeer, 100

 Upland, 95

Podilymbus podiceps, 7

Poœcetes gramineus, 237

Porzana carolina, 79

Prairie Chicken, 115, 116

Progne subis, 256

Ptarmigan, 113

Pygopodes, 1

Quawk, 71

Querquedula cyanoptera, 38
 discors, 37

Quisculus quiscula, 218

Rails, 78

Carolina, 79

Sora, 79

Virginia, 78

Yellow, 80

Rallidæ, 78

Rallus virginianus, 78

Raptores, 122

Raven, 205

Recurvirostridæ, 85

Recurvirostra americana, 85

Redhead, 42

Redpoll, 229

Redstart, 297

Regulus calendula, 318
 satrapa, 317

Rhynchophanes mccowni, 236

Riparia riparia, 262

Ring-necked Duck, 49

Robin, 325

Ross's Goose, 57

Ruddy Duck, 53

Ruddy Turnstone, 102

- Sage Hen, 118
 Sanderling, 90
 Sandpipers, 85
 Bartramian, 95
 Least, 88
 Solitary, 93
 Spotted, 96
 Sapsucker, 167
 Sarcophaga, 123
 Sayornis phoebe, 192
 sayus, 194
 Scaup Duck, 46
 Scolopacidae, 85
 Scoter, 51, 52
 American, 51
 White-winged, 52
 Scotiaptex nebulosa, 149
 Sea Ducks, 42
 Selurus aurocapillus, 289
 noveboracensis, 291
 Setophaga ruticilla, 297
 Shore Birds, 83
 Shoveller, 38
 Shrikes, 266
 Northern, 266
 White-rumped, 268
 Sialia sialis, 326
 currucoides, 328
 Sitta canadensis, 313
 carolinensis, 313
 Sittidae, 311
 Snipe, 85
 Snowbird, 233
 Snow Goose, 54
 Sparrows, 219
 Chipping, 245
 Clay-coloured, 246
 English, 232
 Fox, 251
 Harris's, 240
 House, 232
 Lark, 240
 Savannah, 239
 Song, 249
 Swamp, 250
 Tree, 244
 Vesper, 237
 White-crowned, 241
 White-throated, 242
 Spatula clypeata, 38
 Speotyto cunicularia, 157
 Sphyrapicus varius, 167
 Spinus pinus, 231
 Spizella monticola, 244
 pallida, 246
 passerina, 245
 Spoonbill, 38
 Squatarola squatarola, 98
 Steganopodes, 21
 Steganopus tricolor, 83
 Sterna, caspia, 16
 forsteri, 17
 hirundo, 18
 Sterninae, 16
 Striges, 146
 Strigidae, 146
 Strix varia, 148
 Sturnella neglecta, 214
 Surnia ulula, 156
 Swallows, 256
 Bank, 262
 Barn, 259
 Cliff, 258
 Tree, 261
 Swans, 63
 Trumpeter, 64
 Whistler, 63
 Swift, 176, 180
 Chimney, 182
 Sylviidae, 317
 Tanagers, 255
 Crimson-headed, 255
 Scarlet, 256
 Western, 255
 Tanagridae, 255
 Teal, Blue-winged, 37
 Cinnamon, 38
 Green-winged, 35
 Telmatodytes palustris, 307
 Terns, 11, 16
 Black, 19
 Caspian, 16
 Common, 18
 Forster's, 17
 Tetraonidae, 105
 Thrasher, 302
 Thrushes, 319
 Gray-cheeked, 321
 Hermit, 324
 Olive-backed, 322
 Water, 291
 Wilson's, 320
 Tip-up, 96
 Totanus flavipes, 92
 melanoleucus, 91
 Totipalmate Swimmers, 21
 Towhee, 251
 Toxostoma refum, 302
 Trochilidae, 183
 Troglodytes, aedon, 304
 Troglodytidae, 303
 Trumpeter Swan, 64
 Turdidae, 319
 Turnstones, 101
 Tympanuchus americanus, 114
 Tyrant Flycatchers, 187
 Tyrannidae, 187
 Tyrannus tyrannus, 188
 verticalis, 189
 Vermivora celata, 276
 peregrina, 277
 rubricapilla, 276
 Vireonidae, 270
 Vireos, 270
 Red-eyed, 270
 Warbling, 272
 Vireosylva gilva, 272
 olivacea, 270
 Veery, 320
 Vulture, 123

Warblers, 273
 Bay-breasted, 285
 Blackburnian, 287
 Black-poll, 286
 Black and White, 274
 Canada, 297
 Cape May, 278
 Chestnut-sided, 284
 Connecticut, 292
 MacGillivray's, 293
 Magnolia, 283
 Mourning, 292
 Myrtle, 281
 Nashville, 276
 Orange-crowned, 276
 Palm, 288
 Pine, 288
 Tennessee, 277
 Wilson's, 296
 Yellow, 279
 Waxwings, 263
 Bohemian, 263
 Cedar, 264
 Wavey, 54
 Whip-poor-will, 176
 Whiskey Jack, 203
 Whistler, 49
 Whistling Swan, 63
 White-fronted Goose, 58
 Widgeon, 34
 Willet, 94
 Wilsonia, canadensis, 297
 pusilla, 296
 Wilson's Phalarope, 83

Wilson's Snipe, 85
 Wood Duck, 41
 Woodpeckers, 164
 Arctic Three-toed, 165
 Downy, 165
 Hairy, 164
 Lewis's, 172
 Northern Pileated, 169
 Red-headed, 170
 Three-toed, 166
 Wrens, 303
 House, 304
 Prairie Marsh, 307
 Rock, 308
 Short-billed Marsh, 306
 Winter, 308

Xanthocephalus xanthocephalus,
 212

Yellow-legs, 91
 Greater, 91
 Lesser, 92
 Yellow-throat, 295

Zamelodia ludoviciana, 252
 Zenaidura macroura, 120
 Zonotrichia, albicollis, 242
 leucophrys, 241
 querula, 240